

# U.S. GENERAL SERVICES ADMINISTRATION FEDERAL CENTER SOUTH INTERIM SOIL REMEDIATION AND SITE ASSESSMENT FINAL REPORT



4735 East Marginal Way South Seattle, Washington 98134

### **Prepared for:**

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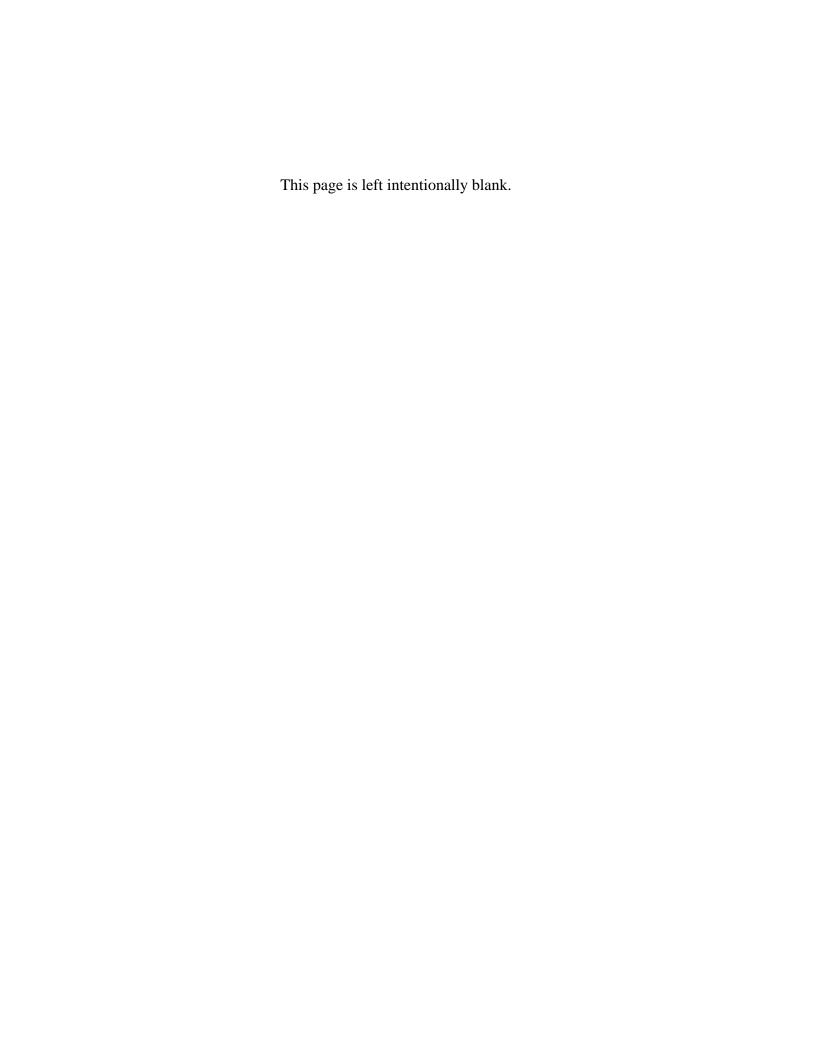
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#### **SUMMARY OF FINDINGS**

The United States (US) General Services Administration (GSA) retained EHS-International, Inc. (EHSI) to conduct an Interim Soil Remediation and Site Assessment of a portion of the Federal Center South property, located at 4735 East Marginal Way South in Seattle, Washington 98134. The Interim Soil Remediation and Site Assessment took place within an asphalt-paved parking lot located west of the Federal Center South Building 1202 and immediately east of the Duwamish Waterway. Portions of Building 1202 are currently being demolished for construction of a new office building. This report summarizes field activities and observations, analytical results, and contaminated soil disposal documentation for the Federal Center South Interim Soil Remediation and Site Assessment.

The purpose of the Federal Center South Interim Soil Remediation and Site Assessment was to remove and dispose of chemically-impacted soils from four areas and to assess potentially contaminated areas across the Building 1202 parking lot and its environs. The areas of suspected contamination were identified during a recent geotechnical investigation and previous site investigations conducted onsite. The four contaminated excavation areas are identified as the Northeast, the Central, the South, and the Southwest Excavations. Field test activities and analytical results associated with the Northeast Excavation and groundwater monitoring well FC9 will be addressed in a separate report as part of the Voluntary Cleanup Program negotiations with Washington Department of Ecology (Ecology) for the Federal Center South property.

This report focuses on field activities and analytical results for the following areas:

- Contaminated soil removal of the Central, South, and Southwest Excavations;
- Hazardous waste characterization and disposal of medical/pharmaceutical waste and non-hazardous solid waste consisting of metal oil drums and cans removed from the Southwest Excavation;
- Installation and sampling of groundwater monitoring wells at four select locations around the perimeter of Building 1202; and
- Soil Vapor Intrusion assessment and soil sampling/analysis within the proposed building footprint, on the west side of Building 1202 in the vicinity of boring HCB-5.

EHSI field geologist observed soil staining, petroleum-like odor, and positive sheen in soils excavated from the Central, South, and Southwest Excavations. Groundwater was encountered within each excavation to a total depth of 6 feet below ground surface (bgs).

EHSI supervised the removal of 1,018 tons of petroleum- contaminated soils from the three excavations. Contaminated soil was hauled off-site, treated by thermal desorption process, and disposed of as class 3 soil at the CEMEX facility in Everett, Washington.

During removal of contaminated soil from the Southwest Excavation, buried 55-gallon metal drums and 5-gallon metal cans containing residual petroleum products, and numerous glass bottles and containers associated with medical/pharmaceutical laboratories were encountered. These materials were separated from the contaminated soil, characterized, transported off-site for disposal and recycling. Based on visual observations and confirmation from soil

analytical testing, all three excavation areas at Federal Center South were free of diesel- to lube oil-range TPH, and VOCs contaminated soils at the completion of excavation.

Contaminants in soils and groundwater identified at the Federal Center South property included total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), including benzene, toluene, ethylbenzene, and xylenes (BTEX), polycyclic aromatic hydrocarbons (PAHs), and heavy metals.

Following contaminated soil removal, closure soil samples collected from the sidewalls of the Central and South Excavations and composite soil samples collected from each of the three overburden soil stockpiles associated with the excavations were analyzed for diesel- to heavy oil-range TPH. Analytical results indicate no measureable concentrations of diesel- to heavy oil-range TPH were detected above laboratory reporting limits in any of the closure or overburden stockpile samples.

Closure soil samples collected from the sidewalls of the Southwest Excavation and one composited soil sample collected from the contaminated soil stockpile were analyzed for gasoline-, diesel-, and lube oil-range TPH; VOCs; BTEX, PAHs; polychlorinated biphenyls (PCBs); and Resource Conservation & Recovery Act (RCRA) metals. Analytical results indicate the following:

- Gasoline-, Diesel-, and Lube Oil-Range TPH: No measureable concentrations of gasoline-, diesel-, or lube oil-range TPH were detected above laboratory reporting limits in any of the nine closure sidewall samples. Gasoline, diesel, and lube oil concentrations were detected in the contaminated soil stockpile sample. However, at concentrations below the applicable Washington State Model Toxics Control Act (MTCA) Method A Soil Cleanup Levels for Unrestricted Land Uses (173-340 WAC).
- VOCs (including BTEX): No measureable concentrations of VOCs were detected above laboratory reporting limits in any of the closure sidewall samples after the removal of contaminated soil was completed at the Southwest Excavation. Concentrations of xylenes, trichloroethylene (TCE), and six other VOCs were detected in contaminated soil removed from and stockpiled next to the Southwest Excavation (contaminated soil stockpile sample FCS-HP-01). The TCE concentration in contaminated soil stockpile sample FCS-HP-01 exceeded the MTCA Method A Soil Cleanup Level for Unrestricted Land Uses. The concentrations of xylenes and six other VOCs detected in FCS-HP-01 were below the MTCA Method A Soil Cleanup Levels for Unrestricted Land Uses. The contaminated soil stockpile from the Southwest Excavation was subsequently removed and hauled off-site for proper disposal.
- PAHs: Naphthalene was detected in three of the nine closure soil samples and in the
  contaminated soil stockpile sample. One closure sample and the stockpile sample
  contained concentrations of six non-carcinogenic PAH compounds. None of the
  concentrations of naphthalene or the six non-carcinogenic PAH compounds exceeded
  MTCA Method A Soil Cleanup Levels for Unrestricted Land Uses. No carcinogenic
  PAHs were detected.
- PCBs: No measureable concentrations of PCBs were detected in the closure sidewall samples or the contaminated soil stockpile sample FCS-HP-01.

RCRA Metals: Concentrations of arsenic, barium, chromium, and lead were detected
in the closure soil samples and the contaminated soil stockpile sample FCS-HP-01.
None of the metal concentrations exceeded their applicable MTCA Method A or B
Soil Cleanup Levels for Unrestricted Land Uses. No measureable concentrations of
cadmium, mercury, selenium, or silver were detected soil samples collected from the
Southwest Excavation.

A test pit soil sample (FCS-TP8-6.5) collected from below the water table in the vicinity of soil HCB-5 and beneath the planned building footprint, had a diesel-range TPH concentration of 4,700 mg/kg. At this concentration, the sample diesel-range TPH concentration exceeded the MTCA Method A Soil Cleanup Level of 2,000 mg/kg. Another test pit soil sample (FCS-TP8-5) collected from the same test pit within the vadose zone above the water table had a diesel-range TPH concentration that was below the MTCA Method A Soil Cleanup Level (2,000 mg/kg).

Groundwater samples collected from the four newly installed monitoring wells EHSI-MW1 through EHSI-MW4 were analyzed for gasoline-, diesel-, and lube oil-range TPH; VOCs, PAHs, and Priority Pollutants dissolved metals. Analytical results indicate the following:

- Gasoline-Range TPH: No measureable concentrations of gasoline-range TPH were detected in any of the four groundwater samples submitted for analysis.
- Diesel- and Lube Oil-Range TPH: The groundwater sample collected from well EHSI-MW2 had a diesel-range TPH concentration of 780 micrograms per liter (μg/L), which exceeded the MTCA Method A Groundwater Cleanup Level of 500 μg/L. This sample also had a lube oil-range TPH concentration of 280 μg/L, which was below the MTCA Method A Groundwater Cleanup Level of 500 μg/L. The detected diesel-range TPH concentrations in samples from wells EHSI-MW1 and EHSI-MW4 were below the regulatory cleanup level. No measurable concentrations of diesel- and lube oil-range TPH were detected above test method reporting limits in the sample collected from EHSI-MW3.
- VOCs (including BTEX): A benzene concentration of 5.1 µg/L was detected in the groundwater sample collected from EHSI-MW2. This concentration exceeded the MTCA Method A Groundwater Cleanup Level of 5.0 µg/L established for benzene in groundwater. The vinyl chloride concentrations detected in groundwater samples collected from three of the four wells ranging from 0.26 to 2.7 µg/L exceeded the MTCA Method A Groundwater Cleanup Level of 0.2 µg/L. The remaining detected VOCs in groundwater samples collected from EHSI-MW1 and EHSI-MW2 were found below their applicable regulatory cleanup levels. No measureable concentrations of VOCs were detected above test method reporting limits in the sample collected from EHSI-MW3.
- PAHs: No established regulatory cleanup levels are available for the six non-carcinogenic PAH compounds detected in groundwater samples collected from EHSI-MW1 and EHSI-MW2. Chrysene, a carcinogenic PAH compound, was detected in the groundwater sample collected from EHSI-MW1 at a concentration of 0.13 μg/L. Because none of the six remaining carcinogenic PAH compounds were detected in this sample, the concentration for total carcinogenic PAHs was calculated at 0.0013 μg/L using the toxicity equivalency factor (TEF). This total carcinogenic PAH

- concentration was below the MTCA Method A Groundwater Cleanup Level of  $0.1~\mu g/L$ . No measureable concentrations of PAHs were detected above test method reporting limits in the sample collected from EHSI-MW3.
- Priority Pollutants Dissolved Metals: A dissolved arsenic concentration of 11.6  $\mu$ g/L was detected in the groundwater sample collected from well EHSI-MW2. This concentration exceeded the MTCA Method A Groundwater Cleanup Level of 5  $\mu$ g/L established for arsenic in groundwater. None of the remaining dissolved metal concentrations detected in the four groundwater samples exceeded regulatory cleanup levels.

Potential petroleum hydrocarbon contamination was identified in subsurface soil boring HCB-5, located within the footprint of the new Federal Center South building. Analyses of test pit soil samples collected from this area indicated that diesel-range petroleum hydrocarbons in excess of the MTCA Method A Cleanup Levels for Unrestricted Land Uses were present in an area that by design would be below the planned footprint of the new Federal Center South building. Soil vapor sampling was conducted on September 27, 2010, under the direction of an EHSI field geologist. Laboratory analytical results indicated that VOCs (specifically BTEX) in all three samples analyzed using U.S. Environmental Protection Agency (EPA) Test Method 8260 were below test method reporting limits for each of the individual VOCs. On the basis of the absence of potential indicator hazardous substances (IHSs) in the vadose soils located within the footprint of the new Federal Center South building, EHSI concluded that there is no likelihood that VOCs in soil vapor beneath the future Federal Center South building will cause an unacceptable risk to the future building occupants.

Based on the results and findings of the Federal Center South Interim Soil Remediation and Site Assessment, all readily identifiable and documented chemical contamination liabilities were mitigated from the three excavation areas at Federal Center South parking lot west of Building 1202. Further environmental work involving groundwater monitoring and sampling is recommended at the Federal Center South parking lot to assess for the reduction of contaminant concentrations in groundwater following source removal. Subsequent groundwater monitoring and sampling of the four newly-installed wells (i.e., EHSI-MW1 through EHSI-MW4) will be discussed in a separate report.

#### 1.0 INTRODUCTION

GSA retained EHSI to conduct an Interim Soil Remediation and Site Assessment of a portion of the Federal Center South property in Seattle, Washington (Figure 1). The Interim Soil Remediation and Site Assessment took placed within an asphalt-paved parking lot located immediately west of the former Building 1202 and immediately east of the Duwamish Waterway (Figure 2). This report summarizes field activities and observations, analytical results, and contaminated soil disposal documentation for the removal of petroleum-contaminated soils at the Federal Center South property.

#### 1.1 PROJECT BACKGROUND

Between 1998 and 2009, GSA contracted with several environmental consultants to execute environmental site investigations following the decommissioning and removal of a 12,000-gallon gasoline underground storage tank (UST) and a 1,000-gallon waste oil UST associated with former Building 1203 that was used for maintaining and providing fuel to GSA motor pool vehicles. Limited exploration during the 1998 UST removal activities indicated that a gasoline release beneath the former fuel dispenser unit had occurred. Release of diesel and heavy oil to soil immediately surrounding the waste oil tank was also observed during closure activities of this tank.

The following site characterization and cleanup activities have been conducted at the Federal Center South property west of Building 1202 since the gasoline and waste oil USTs were removed in May 1998:

Date (Reference)	Field Investigation Conducted (Date)
May 1998 (Herrera 1999)	• UST decommissioning and closure activities, including excavation and removal of one 12,000-gallon gasoline tank, one 1,000-gallon waste oil tank, and approximately 170 cubic yards of petroleum-contaminated soil (May 1998).
August 1998 to July 1999	• Site investigation including soil and groundwater sampling from 15 probe soil boring locations (August 1998).
(Herrera 2000)	<ul> <li>Additional contaminated soil excavation (approximately 350 cubic yards) from the gasoline pump dispenser area and around the waste oil UST (April 1999).</li> </ul>
	• Installation of 7 groundwater monitoring wells (FC1 through FC7) and first quarter sampling event (June and July 1999).
October 1999 to April 2001	• Collection of groundwater samples from wells FC1 through FC7 during eight sampling events (October 1999 through April 2001).
(Herrera 2001)	• Installation of groundwater monitoring wells FC8 and FC9 (installed in October 2000) and collection of groundwater samples from these wells during three sampling events (October 2000 through April 2001).

Date (Reference)	Field Investigation Conducted (Date)
July 2001 to April 2003	• Collection of groundwater samples from wells FC1 through FC9 during four sampling events (July 2001 through April 2002).
(Herrera 2003)	• Collection of soil and groundwater samples at six probe soil borings in the vicinity of well FC9 (September 2002).
	• Collection of groundwater samples from well FC9 during four sampling events (April 2002 through April 2003).
February 2004 (Herrera 2005)	• Collection of soil samples at 14 probe soil borings downgradient of the former gasoline UST excavation and collection of groundwater sample from well FC3 (February 2004).
September 2008 (EHSI 2008)	• Collection of groundwater samples from wells FC2 through FC9 (well FC1 was destroyed sometime after 2002; September 2008).
September 2009 (EHSI 2009)	• Collection of soil samples from six probe soil borings drilled around the perimeter and hand auger holes at six locations (interior) within the basement crawlspace underneath Building 1202 (September 2009).

Groundwater monitoring data collected between June 1999 and September 2008 indicated that static water level beneath the property is at depths ranging from 5 to 14 feet bgs, with flow direction ranging from west-southwest to northwest towards the Duwamish Waterway (Herrera 2000, 2001, 2003; EHSI 2008). Groundwater has been impacted by gasoline and related contaminants, diesel, and lube oil based on detected concentrations above regulatory cleanup levels in groundwater samples collected from five of the nine monitoring wells installed west of Building 1203. No petroleum contamination in groundwater was detected above reporting limits in these wells during the last sampling event conducted in September 2008.

Soil testing results around the perimeter and underneath (interior) Building 1202 during the September 2009 field investigation revealed low levels of chromium, lead, and PAHs (EHSI 2009). Neither chromium nor lead concentrations detected in soil samples collected during the 2009 investigation were above regulatory cleanup levels. Carcinogenic PAHs were detected above the MTCA Method A Soil Cleanup Level for unrestricted land use, but below the MTCA Method A Soil Cleanup Level for industrial land use in one soil sample collected from the west middle interior portion of Building 1202. Carcinogenic PAHs also were detected in the soil sample collected from the east middle interior portion at concentrations below MTCA Method A Soil Cleanup Levels for both Unrestricted and Industrial Land Uses.

#### 1.2 HART CROWSER GEOTECHNICAL INVESTIGATION

The Federal Center South Interim Soil Remediation and Site Assessment was conducted within select portions of the property based on results of soil and groundwater samples collected during a pre-construction geotechnical study conducted by Hart Crowser, Inc. (HC). In May 2010, HC was retained by the site Contractor, Sellen Construction (Sellen) to drill pre-construction geotechnical borings prior to the proposed construction of an office building on the property. During the May 2010 geotechnical work, HC encountered

potentially contaminated soil and groundwater in monitoring wells and soil borings at five locations across the Federal Center South property. The following five locations and their contaminants of concern detected include (AAL 2010a, 2010b; HC 2010):

- Monitoring well HCMW-1, where gasoline- and heavy oil-range organics were detected in soils and solvents contamination were detected in groundwater at concentrations above MTCA Cleanup Levels;
- Soil boring HCB-3, where diesel-range organics were detected in soils above MTCA Cleanup Levels;
- Soil boring HCB-5, where diesel-range organics were detected in soils above MTCA Cleanup Levels;
- Monitoring well HCMW-2, where solvents contamination in groundwater were detected at concentrations below MTCA Cleanup Levels; and
- Monitoring well HCMW-3, where solvents contamination in groundwater were detected at concentrations above MTCA Cleanup Levels.

#### 1.3 PROJECT PURPOSE

The purpose of the Federal Center South Interim Soil Remediation was to remove and dispose of chemically-impacted soils from four areas of documented and suspected contamination in the parking lot to the west of Building 1202 and its environs, as reported during previous onsite geotechnical and site investigations.

#### 1.4 INVOLVED PARTIES

GSA retained EHSI to execute this Interim Action RI/FS Site Assessment under Contract No. GS-10P-08-LT-D-0088, Task Order #GS-P-10-10-LT-5077 between GSA and EHSI, dated May 27, 2010. EHSI hired Wyser Construction (Wyser) of Snohomish, Washington to provide test pit explorations, contaminated soil removal, transportation, and site restoration services. The CEMEX facility (CEMEX) in Everett, Washington was selected for disposal of the contaminated soil. Marine Vacuum Services, Inc. (Mar-Vac) of Seattle, Washington provided services for removal and disposal of oily-contaminated water from the Southwest Excavation. Pacific Northwest Probe, Inc. of Edgewood, Washington provided soil boring and monitoring well installation services. Kleen Environmental Technologies, Inc. (KET) provided hazardous waste characterization and transportation/disposal services associated with medical/pharmaceutical waste, and non-hazardous solid waste associated with metal oil drums and cans encountered and removed from the Southwest Excavation. EHSI performed site assessments including collection of soil samples for chemical analyses, and provided oversight of contaminated soil removal and site restoration activities. Friedman and Bruya, Inc. (FBI) of Seattle, Washington analyzed soil samples collected during the field investigation at the Federal Center South property.

#### 1.5 FINAL REPORT ORGANIZATION

This report begins with a Summary of Findings, a summary of field services, a general property overview, a site legal description, a discussion of relevant previous investigations conducted, general site conditions, and field observations follow the initial sections. Subsequent sections present the elements of the Interim Soil Remediation and Site Assessment (soil sampling methodology, laboratory analyses, and analytical results), as well as field observations and soil screening results, analytical results, regulatory review, project

conclusions, and recommendations. Four figures, five tables, and six supporting appendices follow the main text. Figure 1 is the Site Location Map of Federal Center South property in Seattle, Washington, and Figure 2 is the Site Layout Map of the Federal Center South property. Figure 3 is the Sample Location Map for the Central and South Excavations, and Figure 4 is the Sample Location Map for the Southwest Excavation. Table 1 presents the sample source information. Table 2 presents the map coordinates for the soil removal excavations, test pits explorations, soil borings, and groundwater monitoring wells installed within the Federal Center South property, as shown in Figure 2. Table 3 presents the analytical results for closure and stockpile soil samples collected from the Central and South Excavations. Table 4 presents the analytical results of closure and stockpile soil samples collected from the Southwest Excavation. Table 5 presents the analytical results of soil samples collected from four soil borings and three test pit excavations in the vicinity of soil boring HCB-5. Table 6 summarizes the analytical results of groundwater samples collected from the four newly installed monitoring wells surrounding the perimeter of Building 1202. Table 7 documents the analytical results for the Vapor Intrusion soil gas analyses. Copies of laboratory analytical reports for soil and groundwater samples are provided in Appendix A. Contaminated soil disposal documentation, including copies of the contaminated soil disposal weight tags and manifests are provided in Appendix B. Copies of bill of ladings for disposal of the petroleum-contaminated groundwater from the Southwest Excavation are provided in Appendix C. Copies of the manifests for transportation, recycling, and disposal of the Southwest Excavation hazardous waste and oil drums/cans are provided in Appendix D. Soil boring logs and monitoring well construction logs are provided in Appendix E. Selected site photographs are provided in Appendix F.

#### 1.6 INTERIM SOIL REMEDIATION OVERVIEW

The Federal Center South Interim Soil Remediation focused on the removal and disposal of chemically-impacted soils from three areas across the parking lot and its environs. The three areas identified during previous onsite geotechnical and site investigations included

- The area surrounding soil boring HCB-3, where diesel-range TPH in soil were detected above regulatory cleanup levels (Central Excavation);
- The area south of soil boring HCB-7 (South Excavation); and
- In the vicinity of groundwater monitoring well HCMW-1, where gasoline- and heavy oil-range TPH, and VOC contamination were detected in groundwater at concentrations above regulatory cleanup levels (Southwest Excavation).

The Federal Center South Interim Soil Remediation consisted of the following elements:

- Removal and disposal of TPH-contaminated soils from the three separate excavation areas;
- Stockpiling of contaminated soil removed from each excavation area on visqueen;
- Stockpiling and separating of metal oil drums and cans from the medical/pharmaceutical waste on the contaminated soil stockpile next to the Southwest Excavation;
- Collecting soil samples from sidewalls of each excavation, as well as from the stockpiled contaminated and "clean" overburden soils;

- Analysis of overburden stockpile and excavation closure soil samples;
- Hazardous material characterization, containment, transportation, and disposal of medical/pharmaceutical waste, along with transportation and disposal of nonhazardous solid waste consisted of metal oil drums and cans; and
- Site restoration including backfilling and compaction of overburden and imported soil for each of the three excavations.

#### 1.7 SITE ASSESSMENT OVERVIEW

The Federal Center South Site Assessment consisted of the following elements:

- Installation of groundwater monitoring wells at four selected locations around the perimeter of Building 1202;
- Collection and analysis of soil samples from four soil borings and three test pits
  placed within the proposed building footprint. More specifically, near geotechnical
  soil boring HCB-5, where diesel-range TPH contamination in soil was encountered;
  and
- Analysis of soil gas samples collected in the vicinity of HCB-5 for Vapor Intrusion screening.

#### 2.0 GENERAL PROJECT DOCUMENTATION

EHSI field geologists documented daily field activities associated with the Federal Center South Interim Soil Remediation and Site Assessment in a bound serialized field note book. Information pertaining to personnel on-site, weather conditions, general activities planned and performed, and any problems encountered onsite were documented by the EHSI field geologist in the field note book.

#### 3.0 SITE OVERVIEW

The Federal Center South property is located southwest of intersection of Diagonal Avenue South and East Marginal Way South, and east adjacent to the Duwamish Waterway, at 4735 East Marginal Way South in Seattle, Washington (Figure 1). The industrial/commercial property consists of an irregular-shaped parcel covering approximately 32.99 acres, and is identified by King County parcel number 357320-0975 (King County 2010); the Federal Center South property legal description is as follows:

INDUSTRIAL ADD ALL POR BLK 23 INDUSTRIAL ADD TGW POR TRS 1 & 2 - 14 THRU 17 - 35 & 53 KELLOGS TRS TGW POR VAC ST ADJ TGW LOTS C-D-E-F UNION PACIFIC ADD TGW BLK 382 SEATTLE TIDE LDS EXT #1 TGW POR VAC ST ADJ TGW POR VAC EXT DIAGONAL AVE S LESS CWW #1 DAF BEG 88.78 FT NWLY OF SE COR LOT 15 BLK 23 AS MEAS ALG E LN SD BLK 23 TH S 70-24-06 W 244.26 FT TO SW COR LT 15 TH N 39-15-20 W TO N LN SLIP #1 DAWSON ST WATERWAY TH N 79-35-39 W 611.50 FT TO ELY MGN CWW #1 TH NWLY ALG SD E MGN TO NXN C/L OF EXT DIAGONAL AVE S TH NELY ALG SD C/L TO NLY COR OF VAC DIAGONAL AVE S VAC ORD 99555 TH SLY ALG ELY LN OF VAC TO SLY MGN OF SD AVE THOF TH NELY & ELY ALG SD MGN TO E LN OF SD BLK 23 TH SLY ALG SD E LN TO POB

The Federal Center South property ranges 5 to 10 feet above mean sea level, consisting of a relatively level concrete/asphalt-paved parking lot and two large multi-story office and warehouse buildings. Buildings currently on-site include a large two-story, L-shaped, brick office building (identified as Building 1201 – historic Ford Motor Company Assembly Plant built in 1931 [King County 2010]) that faces East Marginal Way South, and a large two-story rectangular warehouse building (identified as Building 1202 – built in 1940 [King County 2010]) that is located west-northwest of Building 1201. Commercial businesses and federal agencies currently occupy office spaces in Building 1201. Building 1202 reportedly was used for missile manufacture by the Boeing Company between 1957 and 1970 (AMEC 2010). Other reported use of leased spaces by the federal government in Building 1202 may have included vehicle maintenance, film development, arts and crafts, and medical laboratories (AMEC 2010). Building 1202 is currently being demolished by Sellen in preparation for the construction of an office building. An alley with two former railroad track spurs exists between the buildings.

The majority of the Federal Center South Interim Soil Remediation and Site Assessment work is located within a large, fenced, asphalt/concrete-paved parking lot west of and adjacent to Building 1202, and east of and adjacent to the Duwamish Waterway. Access into the parking lot is through a fenced gate at the northeast corner adjacent to Building 1202. A rectangular area located west-northwest of Building 1202 represents the former building footprint of Building 1203. The former GSA motor pool previously occupied Building 1203, which included previously removed 12,000-gallon gasoline and 1,000-gallon waste oil USTs.

#### 3.1 GENERAL SITE SOIL DESCRIPTION

General site soil stratigraphy of the Federal Center South property, based on soil borings and monitoring wells installed during previous investigations, as well as test pit explorations and contaminated soil removal activities consisted of fill material overlying alluvial sand. Fill, encountered from beneath the asphalt pavement to an approximate depth of 1 foot, consisted of dark grayish brown sand and crushed gravel with variable amounts of silt. Underlying the fill was an olive brown fine-grained sand layer encountered at depths ranging from 1 to 6 feet bgs. Underlying the olive brown sand layer was a very dark gray to black fine- to medium-grained sand, with occasional alternate layers of dark gray silt with variable amounts of organic material. The base of the dark gray/black sand unit was not reached in any of the borings, monitoring wells, test pits, or excavations, to a maximum depth of 16.5 feet bgs.

#### 3.2 GENERAL GROUNDWATER CONDITION

Groundwater seeped into the Central and South Excavations and had stabilized to a maximum depth of 6 feet bgs. Groundwater seeped in the Southwest Excavation and had stabilized to a maximum depth of 7 feet bgs. Static groundwater levels in the four monitoring wells measured from top of well casing at depths ranging from 5.90 feet bgs at well EHSI-MW4 to 9.34 feet bgs at well EHSI-MW2. Based on monitoring data collected during previous field investigations conducted onsite, the inferred groundwater flow direction beneath Federal Center South property generally ranged to the west to southwest towards the Duwamish Waterway.

#### 4.0 CONTAMINATED SOIL REMOVAL OVERVIEW

#### 4.1 UTILITY LOCATE

EHSI retained a utility locator service provider Applied Professional Services, Inc. (APS) of Issaquah, Washington to locate underground utilities in the vicinity of proposed soil borings, monitoring wells, test pits, and excavation areas. Utilities located and marked on the ground surface at the site included the following:

- An 8-inch diameter sewer line oriented north-south and adjacent to a former railroad track spur and the west side of Building 1202;
- A water line oriented north-south and located approximately 15 feet west of Building 1202, with water connecting lines to Building 1202; and
- A buried 8-inch diameter storm water pipeline oriented north-south, and connected to a storm water catch basin adjacent to the Southwest Excavation.

Other underground utilities were already marked by utility companies for Sellen in preparation for de-construction of Building 1202 and demolition of Building 1203.

#### 4.2 EXCAVATION AREAS

Wyser field personnel utilized a large track hoe equipped with a 3/8-cubic yard bucket to remove contaminated soils from each of the excavation areas on-site.

#### 4.2.1 CENTRAL EXCAVATION

The Central Excavation was a rectangular excavation with its final dimensions of approximately 14 feet wide by 25 feet long, and extended to a depth of 6 feet bgs to groundwater. Overburden soils from beneath the asphalt pavement to an approximate depth of 4 feet bgs were placed on visqueen in two distinct soil stockpiles adjacent to the excavation, designated as soil stockpiles #1 (SP1) and #2 (SP2). The overburden soils were considered "clean" based on visual observations and field screening tests (i.e., no chemical odor present, no elevated photovoltaic ionizer detector (PID) readings above background levels, lack of soil staining or sheen). Contaminated soils removed from the central excavation from 4 to 6 feet bgs were placed on visqueen alongside the excavation.

#### 4.2.2 SOUTH EXCAVATION

The South Excavation was a square-shaped excavation with its final dimensions of approximately 10 feet by 10 feet, and extended to a depth of 6 feet bgs to groundwater. "Clean" overburden soils from beneath the asphalt pavement to an approximate depth of 4 feet bgs were placed on visqueen adjacent to the excavation, and was designated as soil stockpile #3 (SP3). Contaminated soils removed from the south excavation from 4 to 6 feet bgs were placed on visqueen alongside the excavation.

#### 4.2.3 SOUTHWEST EXCAVATION

The Southwest Excavation was a large irregular, rectangular excavation with its final dimensions of approximately 46 feet wide by 89 feet long, and extended to a depth of 7 feet bgs to groundwater. Clean overburden soils were placed on visqueen adjacent to the excavation in two distinct stockpiles. Contaminated soils from 4 to 7 feet bgs were placed on visqueen adjacent on the north side of the excavation. Debris encountered during removal of

contaminated soil, including rusted metal 55-gallon drums and 5-gallon cans previously contained petroleum products and assorted glass bottles associated with medical/pharmaceutical waste were stockpiled on the east side with the contaminated soil. Most of the medical/pharmaceutical waste debris was separated from the contaminated soil by hand after each bucket load of soil was removed from the excavation. The contaminated soil stockpile for the Southwest Excavation was designated as the hazardous soil stockpile (HP).

#### 4.3 CLOSURE AND STOCKPILE SOIL SAMPLING PROCEDURES

EHSI collected closure soil samples from each of the three contaminated soil removal excavations. No bottom closure samples were collected because of groundwater that had seeped in and stabilized in each of the excavations. Closure soil samples from the sidewalls of each excavation were obtained by scraping the selected sidewall with the track hoe bucket, collecting a representative grab sample from the center of the bucket, and placed the grab soil sample directly into sample containers provided by the laboratory. In addition to the closure samples, EHSI collected composited soil samples from each of the four designated soil stockpiles for chemical analysis to determine the presence or absence of contamination and/or disposal options of contaminated soils. Table 1 provides a summary of the soil sample source information.

#### 4.4 SAMPLE HANDLING AND SHIPPING

Grab soil samples were obtained during excavation activities for field screening purposes to assess the progress of the removal of contaminated soil at each excavation. Field screening included visual inspection for indication of oily sheen or staining, the presence or absence of chemical or petroleum-like odor, and measuring the presence of ionizable volatile compounds using a PID. Field screening results were documented in the field notebooks.

Soil samples for chemical analysis were collected according to Ecology guidelines. Soil samples collected from sidewalls of contaminated soil removal excavations were collected directly from the center of the track hoe bucket by hand and placed directly into sample containers provided by the analytical laboratory. Soil samples for gasoline-range TPH and VOCs analysis were collected using the U.S. EPA 5035A sampling protocol. The EHSI field geologist wore a clean pair of nitrile gloves at each sample location. After collection, each sample was uniquely labeled and then immediately placed in a cooler with ice to be kept cool prior to being hand-delivered to the laboratory under chain-of-custody protocols. At the end of the day, soil samples collected were transported, under full chain-of-custody, to FBI for chemical analysis.

#### 4.5 SOIL SAMPLE DOCUMENTATION

EHSI field geologists documented all field activities associated with soil sampling from each excavation. Documentation included a comprehensive discussion of field observations, including field screening results, and any problems encountered. All soil sample containers were labeled with the following information:

- EHSI project identification number;
- Sample date and time collected; and
- Sample identification number.

Each soil sample collected was given a unique identification number as described below:

<u>Project Location/Excavation Designation/Sample Number</u>: For example, sample FC-CE-ESW1 is the soil sample collected from the Federal Center South Interim Soil Remediation (FC), the Central Excavation (CE), and the first sample from the east sidewall of the excavation (ESW1).

In addition, the sample chain-of-custody forms were completed with the EHSI project identification number, the sampler's name, sample identification codes, number of containers, and date and time the sample was collected. The chain-of-custody form was included with samples transported to the analytical laboratory.

#### 4.6 SAMPLING DECONTAMINATION PROCEDURES

EHSI field geologists wore disposal nitrile gloves for collecting closure soil samples. A new pair of gloves was donned for each soil sample collected. No decontamination was required for soil sample collection.

#### 4.7 LABORATORY ANALYSES ON CLOSURE AND STOCKPILE SOIL SAMPLES

#### 4.7.1 CENTRAL EXCAVATION SOIL SAMPLE ANALYSES

The six soil samples collected from the sidewalls of the Central Excavation (CE) and the two overburden soil stockpiles associated with the Central Excavation (SP1 and SP2) were analyzed for diesel- to heavy oil-range TPH (including lube oil) using Ecology Test Method NWTPH-Dx (Dx; Table 3).

#### 4.7.2 SOUTH EXCAVATION SOIL SAMPLE ANALYSES

The five soil samples collected from the sidewalls of the South Excavation (SE) and the overburden soil stockpile associated with the south excavation (SP3) were analyzed for diesel- to heavy oil-range TPH (including lube oil) using Ecology Test Method NWTPH-Dx (Table 3).

#### 4.7.3 SOUTHWEST EXCAVATION SOIL SAMPLE ANALYSES

The ten soil samples collected from the sidewalls of the Southwest Excavation and the contaminated soil stockpile associated with the Southwest Excavation (HP) were analyzed for the following contaminants (Table 4):

- Gasoline-range TPH using Ecology Test Method NWTPH-Gasoline Extended (Gx);
- Diesel- to heavy oil-range TPH (including lube oil) using Ecology Test Method NWTPH-Dx;
- VOCs (including BTEX) using U.S. EPA Test Method 8260C;
- PAHs using U.S. EPA Test Method 8270D with selective ion monitoring (SIM);
- PCBs using U.S. EPA Test Method 8082; and
- RCRA metals (including arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver) using U.S. EPA Test Methods 200.8 and 1631E (for mercury only).

#### 4.8 CLOSURE AND STOCKPILE SOIL ANALYTICAL RESULTS

Copies of soil analytical reports and chain-of-custody forms associated with soil samples collected from the Central, South, and Southwest Excavations are provided in Appendix A. The following sections summarize field observations during soil removal and the analytical results of closure and stockpile soil samples collected following contaminated soil removal excavation activities.

## 4.8.1 CENTRAL EXCAVATION CONDITION AND ANALYTICAL RESULTS OF CLOSURE AND STOCKPILE SOIL SAMPLES

Soil removal activities for the Central Excavation began on August 2, 2010. Approximately 4-inch thick of asphalt pavement was first removed from the Central Excavation area. No soil staining, odor, or other indications of contamination were observed in soil removed from the top 3 to 4 feet bgs beneath the asphalt. The overburden soil was removed and placed on a large area covered with visqueen on the west side of the excavation into two separate stockpiles designated as SP1 and SP2. The EHSI field geologist observed soil staining, positive soil sheen tests, an oily sheen on the water surface, and hydrocarbon-like odor within fine-grained sand between 3 or 4 feet bgs to groundwater (approximately 6 feet bgs). Approximately 70 tons of petroleum-impacted soil was excavated from the Central Excavation. Contaminated soil was placed on a large area covered with visqueen next to the excavation. After contaminated soil was removed, four closure grab soil samples were collected from the sidewalls above the water table at approximately 5 feet bgs from the Central Excavation (samples FC-CE-NSW1, FC-CE-ESW1, FC-CE-SSW1, and FC-CE-WSW1). In addition, a composited soil sample was collected from each of the two "clean" overburden stockpiles associated with the Central Excavation (composited samples FC-CE-SP1 and FC-CE-SP2).

Analytical results indicate that none of the four closure soil samples or the two overburden stockpile samples had measurable concentrations of diesel- to lube oil-range TPH above laboratory reporting limits (Table 3).

# 4.8.2 SOUTH EXCAVATION CONDITION AND ANALYTICAL RESULTS OF CLOSURE AND STOCKPILE SOIL SAMPLES

Soil removal activities for the South Excavation began on August 2, 2010. Approximately 4-inch thick of asphalt pavement was first removed from the South Excavation area. EHSI field geologist observed no soil staining, odor, or other indications of contamination in soil removed from the South Excavation from beneath the asphalt to a depth of 4 feet bgs. Approximately 25 tons of contaminated soil based on positive sheen tests, the presence of petroleum-like odor, and staining were removed from 4 to 6 feet bgs. Soil removed from the excavation was placed on visqueen on the south side of the excavation, and was designated as overburden stockpile #3. Four closure grab soil samples were collected from the sidewalls above the water table at approximately 5 feet bgs from the South Excavation (samples FC-SE-NSW1, FC-SE-ESW1, FC-SE-SSW1, and FC-SE-WSW1). In addition, a composited soil sample was collected from the overburden stockpile (composited sample FC-SE-SP3).

Analytical results indicate that none of the four closure soil samples or the overburden stockpile sample had measurable concentrations of diesel- to lube oil-range TPH above laboratory reporting limits (Table 3).

#### 4.8.3 SOUTHWEST EXCAVATION CONDITION

Soil removal activities for the Southwest Excavation began on August 3, 2010. Approximately 4-inch thick of asphalt pavement was first removed from the Southwest Excavation area on the north side and adjacent to monitoring well HCMW-1. No staining, odor, or other indications of contamination was observed in soil removed from beneath the asphalt to depths ranging between 4 and 5 feet bgs. Overburden soil was placed on a large area covered with visqueen on the southwest side of the excavation. EHSI field geologist observed contaminated soils based on black soil staining, strong petroleum-like odor, and positive sheen tests, starting from 5 feet bgs and extending to a depth of 7 feet bgs into groundwater. Petroleum-impacted soil was removed from the excavation and placed on a large area covered with visqueen on the north side of the Southwest Excavation.

Soil removal activities were suspended at the Southwest Excavation by EHSI field geologist on August 4, 2010 after encountering buried metal 55-gallon drums, assorted 5-gallon and smaller-sized cans, and liquid-filled glass bottles, along with a strong chemical odor. At this point, the excavation had extended to the east, with dimensions approximately 27 feet wide and 35 feet long, and extending to a depth ranging from 7 to 9 feet bgs (Figure 4). Groundwater seeped in and stabilized at a depth of 7 feet bgs. On August 6, 2010, a composited soil sample was collected from the contaminated soil stockpile for chemical analysis to determine contaminants of concern associated with the chemical odor, and the level of personal protective equipment (PPE) to be worn for continuing removal activities (sample FCS-HP-01). Based on the results, Level C PPE included Tyvek suit, air-purifying respirators with organic vapors cartridges, rubber steel-toed boots, and nitrile gloves, were worn by the EHSI field geologist and Wyser track hoe operator during subsequent soil removal.

Removal of contaminated soil with metal drums/cans debris resumed at the Southwest Excavation on August 16, 2010. Asphalt pavement was removed to the east and north of the excavation, and the top 4 to 5 feet beneath the asphalt of "clean" overburden soil was placed on a large area covered with visqueen to the northeast near the excavation. Contaminated soil with metal debris was removed from the excavation based on visual observations. Metal debris was separated from contaminated soil and placed on the east side of the contaminated soil stockpile. Heavy oil from metal 5-gallon cans that still contained oil was released during removal, creating a heavy oily sheen on the water surface in the excavation. Bubbles surfacing on the water table surface, which stabilized at a depth of 7 feet bgs, were observed indicating more debris below the water table. Wyser retained Mar-Vac on August 16 and 17, 2010 to pump and remove approximately 10,900 gallons of oily contaminated groundwater from the excavation for treatment and disposal.

Medical/pharmaceutical waste, such as assorted sized glass bottles filled with liquid, crystalline material, or tablets and ampoules of surgical sutures, was encountered further east (approximately 55 feet east from the western edge) on August 17, 2010, after excavating and removing most of the metal drums/cans debris mixed in with contaminated soil. During soil removal, most of the bottles and debris associated with medical/pharmaceutical waste were separated out by hand for each track hoe bucket placed on the contaminated soil stockpile. The medical waste was observed within fine-grained sand and beneath a storm water drain pipe starting at a depth of 4 feet bgs, and extending to a depth of 6 feet bgs. The drain pipe

was removed, and the excavation extended further east approximately 21 feet beyond the east edge of the metal debris, and extending to a depth ranging from 6 to 7 feet bgs (Figure 4).

Contaminated soil removal activities at the Southwest Excavation were completed and closure soil samples were collected from the sidewalls above the water table on August 18, 2010. Nine (9) closure sidewall samples were collected from the Southwest Excavation including (Figure 4):

- Samples FCS-SW-SSW, FCS-SW-W, and FCS-SW-NNW collected from sidewalls near monitoring well HCMW-1;
- Samples FCS-SW-WNW, FCS-SW-NMID, and FCS-SW-SMID collected from sidewalls adjacent to where the metal oil drums/cans debris was encountered; and
- Samples FCS-SW-NE, FCS-SW-E, and FCS-SW-SE collected from sidewalls adjacent to where the medical/pharmaceutical waste was encountered.

## 4.8.4 ANALYTICAL RESULTS OF CLOSURE AND CONTAMINATED STOCKPILE SOIL SAMPLES FROM THE SOUTHWEST EXCAVATION

Analytical results of the nine closure sidewall soil samples collected from the Southwest Excavation and the composited contaminated soil stockpile sample FCS-HP-01 indicate the following:

- No measurable concentrations of gasoline-, diesel-, or heavy oil-range TPH were detected above laboratory reporting limits in any of the nine closure samples. Contaminated stockpile sample FCS-HP-01 contained 36 milligrams per kilogram (mg/kg) gasoline-, 66 mg/kg diesel-, and 400 mg/kg lube oil-range TPH.
- No measurable concentrations of VOCs were detected above laboratory reporting limits in any of the nine closure samples. Stockpile sample FCS-HP-01 contained 0.08 mg/kg ethylbenzene, 0.6 mg/kg xylenes, 0.037 mg/kg TCE, 2.2 mg/kg naphthalene, and six other VOCs that are related to petroleum products.
- Naphthalene was detected in closure sidewall samples collected adjacent to the buried metal oil drums/cans portion of the excavation including FCS-SW-NNW (0.049 mg/kg), FCS-SW-WNW (0.048 mg/kg), and FCS-SW-NMID (0.013 mg/kg), and in the contaminated stockpile sample FCS-HP-01 (0.036 mg/kg). Six other non-carcinogenic PAHs also were detected in closure sample FCS-SW-NMID at concentrations ranging from 0.010 to 0.11 mg/kg, and in the contaminated stockpile sample FCS-HP-01 at concentrations ranging from 0.016 to 0.33 mg/kg. No measureable concentrations of carcinogenic PAHs were detected above laboratory reporting limits in any of the nine closure samples and the contaminated stockpile sample.
- No measureable concentrations of PCBs were detected above laboratory reporting limits in any of the nine closure samples or the contaminated stockpile sample.
- Arsenic was detected in seven of the nine closure samples and the stockpile sample at
  concentrations ranging from 1.01 to 11.6 mg/kg. Barium was detected in all nine
  closure samples and the stockpile sample at concentrations ranging from 8.05 to 19.1
  mg/kg. Chromium was detected in all nine closure samples and the stockpile sample
  at concentrations ranging from 4.47 to 7.08 mg/kg. Lead was detected in six of the

nine closure samples and the stockpile sample at concentrations ranging from 1.02 to 176 mg/kg. No measurable concentrations of cadmium, mercury, selenium, or silver were detected above laboratory reporting limits in any of the nine closure samples and the contaminated stockpile sample.

#### 4.9 CONTAMINATED SOIL DISPOSAL

Once closure and stockpile characterization samples analytical results were reported and assessed after soil removal from each excavation, EHSI authorized Wyser to dispose of the contaminated soils. Wyser loaded and transported a total of 1,018 tons of contaminated soils removed from the Central, South, and Southwest Excavations to the CEMEX facility on August 3-5, and 16-24, 2010. Contaminated soils were disposed of as class 3 soils and thermally desorbed. In addition, Wyser loaded and transported asphalt pavement removed from these three excavation areas for recycling at the United Recycling facility in Seattle, Washington. Copies of the disposal weight tickets and manifest are provided in Appendix B.

#### 4.10 CONTAMINATED WATER DISPOSAL

Approximately 10,900 gallons of oily-contaminated groundwater pumped and removed from the Southwest Excavation into liquid tanker trucks was transported and treated by Mar-Vac at their facility on August 16 and 17, 2010. Copies of the bills of lading and manifest are provided in Appendix C.

#### 4.11 HAZARDOUS AND NON-HAZARDOUS WASTE DISPOSAL

KET completed hazardous material characterization and re-packing for transportation of medical/pharmaceutical waste removed from the SW Excavation on September 7, 2010. Hazardous material characterization of unknown liquid and solid materials contained in glass bottles were tested for pH, flash point, and flame tests. Similar-characteristic materials were placed in either steel or high-density polyethylene drums and packed with vermiculite. Based on the hazardous characterization results, the following hazardous substances identified in glass bottles and jars were separated and placed in each of the eight drums/containers with similar-characteristic materials:

- Liquid hydrochloric and sulfuric acid (corrosive liquids, acidic);
- Liquid mineral spirits, and boilable gut sutures in sealed glass tubes contained in xylenes (flammable liquids);
- Mineral oil/water mixture (flammable liquids);
- Magnesium sulfate, calcium chloride, calcium sulfate, trace glycol/water solution, and sulfathiazole (hazardous/toxic liquids);
- Bottles with residues of embalming fluids (formaldehyde, methanol, phenol, and magnesium sulfate), atropine sulfate, calcium acetate, and chloroform (toxic liquids);
- Sodium and calcium hydroxide solutions (corrosive liquids, basic); and
- Non-boilable gut sutures in sealed glass tubes contained in ethanol, and phenylmercuric benzoate.

Each drum/container was labeled according to its contents. All eight hazardous drums containing the medical/pharmaceutical waste, and seven non-hazardous 55-gallon steel

drums containing crushed metal oil drums/cans were picked up for transportation and disposal (medical waste) or recycling (metal debris) by KET on September 13, 2010. Copies of the hazardous and non-hazardous waste manifests are provided in Appendix D. Note: the manifests in Appendix D are not fully executed manifests until the waste is accepted at the designated treatment, storage, and disposal (TSD) facility.

#### 5.0 SITE RESTORATION ACTIVITIES

All three excavation areas were backfilled with a combination of quarry rock spalls, gravel pit run fill, excavated overburden soils, and 1 ¼-minus gravel. Following the completion of the removal of contaminated soils from each excavation, and the results of closure samples indicate no contaminants in soil above regulatory cleanup levels, EHSI directed Wyser to backfill the excavation. The quarry rock spalls was used to backfill the water-filled excavation to a level above the water table. Pit run fill and excavated overburden soils were placed on top of the quarry rock spalls in 1- to 2-foot thick lifts, and compacted each soil lift to 90% using a large compaction roller. The excavation was then brought up to surface grade with 1 ¼-minus gravel. Copies of imported material weight tickets are provided in Appendix B.

Wyser replaced the storm water drain pipe that was removed during excavating of contaminated soil mixed with medical waste from the Southwest Excavation. Wyser connected the storm water catch basin at the southeast corner to the existing concrete drain pipe at the northeast corner using approximately 35 feet long, 8-inch diameter PVC storm water drain pipe, pipe connectors, and clamps.

#### **6.0 SITE ASSESSMENT OVERVIEW**

#### 6.1 SOIL BORING AND MONITORING WELL INSTALLATION

EHSI retained APS to locate underground utilities at each proposed soil boring and monitoring well location prior to executing drilling activities.

#### 6.1.1 WELL BORINGS AND MONITORING WELL INSTALLATION

Four soil borings were advanced at selected locations adjacent to the perimeter of Building 1202 on August 15, 2010 to assess for potential contamination in groundwater based on results from HC geotechnical investigation and groundwater monitoring (groundwater monitoring wells FCS-EHSI-MW1 through FCS-EHSI-MW4; Figure 2). Soil samples obtained during drilling of these borings were logged by an EHSI geologist for soil lithologies and field-screened for indications of contamination. Soils were visually classified in accordance with the Unified Soil Classification System. Soil coloration was determined using Munsell® Soil Color Charts. Field screening included visual inspection for indications of oily sheen or staining and measuring for the presence of ionizable volatile compounds using a PID. Pertinent soil descriptions and classifications, PID readings and other field screening results, and moisture content observations for each boring location were documented on a soil boring log (see Appendix E).

After drilling to the desired depth using a push probe drill rig, a groundwater monitoring well was installed at each of the four selected location on August 16, 2010 (FCS-EHSI-MW1 through FCS-EHSI-MW4; see Figure 2). Each well was constructed of 2-inch inside diameter Schedule 40 polyvinyl chloride (PVC) black casing that is flush-threaded to 0.010-inch slot machine cut PVC well screen casing with a flush-threaded PVC bottom cap. Three

of the four wells each were installed to a maximum depth of 14 feet; well FCS-EHSI-MW2 was installed at a maximum depth of 12.5 feet due to heaving sand conditions. Screened intervals at each well location were determined by the EHSI field geologist based on indications of moisture content observed in soil samples obtained at each sample depth interval during drilling, and static water levels observed in two of the excavations. After drilling to the desired depth, a 10-foot long screened PVC casing with a bottom cap was placed at the bottom of the borehole. A filter pack of clean 10/20-graded Colorado silica sand was placed in the annular space between the casing and the borehole to a height approximately 0.5 foot or more above the top of the screened well casing. Bentonite chips were placed above the filter pack to within 1 foot of the ground surface. The well was capped with a locking well cap. A steel flush-graded well monument was installed in-place over the wellhead and finished surrounding the wellhead and monument with concrete.

#### 6.1.2 SOIL BORINGS IN VICINITY OF SOIL BORING HCB-5

Four soil borings were advanced within the proposed office building footprint on August 16, 2010, in the vicinity of geotechnical soil boring HCB-5, where diesel-range TPH contamination in soil was encountered (soil borings FCS-SB7 through FCS-SB10; Figure 2). Each soil boring was drilled to groundwater to a maximum depth of 8 feet bgs. Soil samples obtained during drilling at each boring location were logged by an EHSI geologist for soil lithologies and field-screened for indications of contamination. One soil sample was collected from each of the four borings within the vadose zone above the water table for chemical analysis. Soil samples were retrieved from the soil-filled plastic liner of the probe soil sampler, and placed directly into sample containers provided by the analytical laboratory.

After drilling and soil sampling has been completed at each boring location, the borehole was backfilled from the bottom of the boring to near the ground surface with bentonite chip seal, and completed at the ground surface with either an asphalt patch or surrounding soil.

#### 6.2 TEST PIT EXPLORATIONS IN VICINITY OF SOIL BORING HCB-5

Three test pit explorations were dug adjacent to the northeast and east of soil boring HCB-5 on August 26, 2010 to assess the potential source of diesel contamination found in soil in this area. Test pit explorations were dug by Wyser using a backhoe equipped with a 1/8-cubic yard bucket. Each test pit was dug to a maximum depth of 7 feet bgs into groundwater. Grab soil samples obtained during test pit excavations were field screened for indications of contamination. Based on field screening results and field observations, one soil sample was collected from the center of the backhoe bucket after scraping the sidewalls of the test pit for chemical analysis. Soil retrieved from the bucket was placed directly into sample containers provided by the laboratory. After soil sampling was completed, each test pit was backfilled with soil excavated from the pit.

#### 6.3 SITE ASSESSMENT DOCUMENTATION

EHSI documented field activities associated with the Federal Center South Site Assessment in a field notebook. Documentation included comprehensive descriptions of field observations during site assessments and sampling activities during soil boring and monitoring well installations. Field observations included soil descriptions of samples collected during drilling, field screening observations and results (i.e., the presence of ionizable VOCs using a PID, sheen, and/or odor); and any problems encountered were documented on a field boring log.

All soil samples placed in laboratory-provided containers were labeled with the following information:

- Project identification number;
- Sample identification number; and
- Sample date and time collected.

Each soil sample collected was given a unique identification number as described below:

<u>Project Site ID/Source Location/Sample Depth</u>: For example, sample FCS-SB7-5 represents the soil sample collected as part of the Federal Center South (FCS) project, at soil boring 7 (SB7) at the 5-foot sample depth interval.

In addition, the sample chain-of-custody form was completed with EHSI project identification number, the sampler's name, date, and sample identification codes, number of containers, and date and time the sample was collected. The chain-of-custody form was included with the samples transported to the analytical laboratory.

#### 6.4 DECONTAMINATION PROCEDURES

EHSI field personnel wore disposal nitrile gloves for collecting soil samples from plasticlined probe soil samplers or grab samples from the center of the backhoe bucket. A new pair of gloves was donned for each soil sample collected. No decontamination was required for soil sample collection.

#### 6.5 SAMPLE HANDLING AND SHIPPING

EHSI field personnel checked all sample jars for completeness and cap tightness. The sealed and labeled sample containers were then placed upright in a cooler with frozen blue ice. The sample cooler was placed in a field vehicle to await transportation to the analytical laboratory. All samples collected from each excavation and soil borings were delivered under sample chain-of-custody protocols to FBI laboratory for chemical analysis.

#### 6.6 LABORATORY ANALYSES ON SOIL SAMPLES

A soil sample collected within the vadose zone above the water table in each of the four soil borings (i.e., SB7 through SB10) and a total of four soil samples collected from the three test pit explorations placed in the vicinity of boring HCB-5 were analyzed for diesel- to heavy oil-range TPH (including lube oil) using Ecology Test Method NWTPH-Dx (Table 5).

#### 7.0 SUBSURFACE CONDITIONS

#### 7.1.1 WELL BORINGS

Soils encountered from the four well soil borings consisted of dark grayish brown very fine-grained to fine-grained sand overlying dark brown to black fine-grained sand with alternate layers of silt and variable amounts of organic material. Groundwater was encountered during drilling at depths ranging between 5.5 and 7 feet bgs.

Petroleum-like odor and a slight oily sheen was observed in soil samples collected at and within the water table during drilling of well boring EHSI-MW2. No staining, odor, or other indications of contamination were observed in soil samples retrieved from well borings EHSI-MW1, -MW3, or -MW4.

#### 7.1.2 TEST PIT EXPLORATIONS

Soils encountered from the four soil borings consisted of dark grayish brown fine-grained sand overlying dark brown/black fine-grained sand. Groundwater was encountered between 5 and 6.5 feet bgs during drilling. No staining, odor, or other indications of contamination was observed in soil samples collected from the four soil borings, each drilled to a maximum depth of 8 feet bgs.

Soils encountered from the three test pit explorations excavated northeast and east and adjacent to boring HCB-5 consisted of crushed gravel and silty sand fill overlying dark grayish brown fine-grained sand overlying very dark gray/black fine-grained sand. Fill extended from beneath the asphalt to a depth of 1 ½ feet bgs. The dark grayish brown sand layer extended from 1 ½ feet bgs to a depth of 5.5 feet bgs. All three test pits were dug into the very dark gray/black sand to a depth of 7 feet bgs into groundwater.

A slight petroleum-like odor was noted within the vadose zone above the water table in test pit EHSI-TP7, with a PID reading measured at 13.1 parts per million (ppm). A grab sample collected from the black sand within the water table had a strong petroleum-like odor with a PID reading measured at 144.4 ppm. Grab samples collected slightly above and within the water table from EHSI-TP8, which was excavated south of the TP7 and southeast of boring HCB-5, had strong petroleum-like odors and PID readings measured from 389.3 to 443.8 ppm. Grab samples collected within the vadose zone above the water table from EHSI-TP9, which was excavated east of TP8, did not have PID readings above background levels. However, a grab sample collected within the water table in TP9 had a PID reading of 253 ppm.

#### 8.0 SOIL BORINGS/TEST PIT ANALYTICAL RESULTS

#### 8.1 SOIL BORING ANALYTICAL RESULTS

No measureable concentrations of diesel- or lube oil-range TPH above laboratory reporting limits were detected in any of the soil samples collected within the vadose zone above the water table at borings SB7 through SB10.

Copies of the laboratory analytical report associated with soil samples collected from the four soil borings SB7 through SB10 are provided in Appendix A.

#### 8.2 TEST PIT ANALYTICAL RESULTS

Soil sample FCS-TP8-6.5 collected within the water table had concentrations of diesel-range TPH (4,700 mg/kg) and lube oil-range TPH (290 mg/kg). The soil sample collected within the vadose zone above the water table in this test pit (soil sample FCS-TP8-5) had a concentration of diesel-range TPH of 90 mg/kg. No measureable concentrations of diesel- or lube oil-range TPH were detected above laboratory reporting limits from the soil sample collected within the vadose zone above the water table from TP7 (soil sample FCS-TP7-6) or the soil sample collected within the water table from TP9 (soil sample FCS-TP9-6.5).

Copies of the laboratory analytical report associated with soil samples collected from the three test pit explorations TP7 through TP9 are provided in Appendix A.

#### 8.3 SOILS REGULATORY REVIEW

The soil sample analytical results were compared to the MTCA Method A and B Cleanup Levels (WAC 173-340-745) for Unrestricted Land Uses. State regulators and environmental

professionals use MTCA Cleanup Levels to compare levels of contamination in soil. MTCA Cleanup Levels are the concentrations standards where (if exceeded) the State of Washington regulators judge a soil sample to be contaminated.

No measurable concentrations of diesel- or lube oil-range TPH were detected above test method detection limits in any of the closure and stockpile soil samples collected from the Central and South Excavations (Table 3). None of these samples exceeded regulatory cleanup levels.

The Southwest Excavation contaminated soil stockpile characterization sample FCS-HP-01, had a TCE concentration of 0.037 mg/kg; this concentration exceeded the MTCA Method A Soil Cleanup Level for TCE of 0.03 mg/kg. The detected constituents in the nine closure samples Southwest Excavation were at concentrations below their applicable MTCA Method A and B Cleanup Levels (Table 4).

A test pit soil sample (FCS-TP8-6.5) collected from below the water table in the vicinity of soil HCB-5 and beneath the planned building footprint, had a diesel-range TPH concentration of 4,700 mg/kg. At this concentration, the sample diesel-range TPH concentration exceeded the MTCA Method A Soil Cleanup Level of 2,000 mg/kg. Another test pit soil sample (FCS-TP8-5) collected from the same test pit exploration within the vadose zone above the water table had a diesel-range TPH concentration of 90 mg/kg, which was below the MTCA Method A Cleanup Level for diesel-range TPH in soil (2,000 mg/kg) (Table 5).

#### 9.0 GROUNDWATER SAMPLING AND ANALYTICAL RESULTS

#### 9.1 WELL DEVELOPMENT

All four groundwater monitoring wells were developed through a combination of surging and pumping using a battery-operated purge pump attached with polyethylene tubing. Development of the wells continued until levels of fine-grained sand and silt were reduced and water removed from the well was generally of clear quality. Wells EHSI-MW1 and EHSI-MW2 dewatered during purging. Development of each of these wells was stopped for a period ranging from 5 to 15 minutes to allow water to recover prior to continuing development. Approximately 12 gallons was purged from well EHSI-MW1; 5 gallons from EHSI-MW2; 20 gallons from EHSI-MW3; and 15 gallons from EHSI-MW4. Development water from each well was contained in 55-gallon drums and stored temporarily near the well.

#### 9.2 GROUNDWATER SAMPLING PROCEDURE

Prior to groundwater sampling, static water level was measured from each well using an electronic water level meter. Each well was purged between three and five well casing volumes of stagnant water using clean, dedicated polyethylene tubing and a decontaminated purge pump prior to collecting samples. After purging the well, groundwater was allowed to recover in the well before collecting a groundwater sample using a dedicated disposable high-density polyethylene bailer attached to nylon cord. The water sample was poured directly into sample containers provided by the analytical laboratory. Care was taken to ensure that no bubbles or headspace were present when filling 40-ml VOA vials for gasoline-range TPH and VOC analyses. Immediately upon filling, each container was securely capped, labeled, and placed into a chilled cooler for storage prior to and during delivery to the analytical laboratory. The date and time of each sample collected was recorded in the field notebook and on the chain-of-custody form.

#### 9.3 LABORATORY ANALYSES ON GROUNDWATER SAMPLES

Groundwater samples from each of the four monitoring wells were collected on September 28, 2010. All four groundwater samples were submitted under chain-of-custody protocol to the FBI analytical laboratory for the following analyses:

- Gasoline-range TPH using Ecology Test Method NWTPH- Gx;
- Diesel- to lube oil-range TPH using Ecology Test Method NWTPH-Dx;
- VOCs (including BTEX) using U.S. EPA Test Method 8260C;
- PAHs using U.S. EPA Test Method 8270D SIM; and
- Priority Pollutants (PP) metals (including arsenic, cadmium, chromium, copper, lead, mercury, nickel, and zinc) using U.S. EPA Test Methods 6010B and 7471A (for mercury only). All four groundwater samples were filtered by the laboratory prior to dissolved PP metals analysis.

#### 9.4 GROUNDWATER ANALYTICAL RESULTS

Groundwater analytical results of samples collected from monitoring wells EHSI-MW1 through EHSI-MW4 are summarized in Table 6, and indicate the following:

No measurable concentrations of gasoline-range TPH were detected in any of the groundwater samples collected from the four wells. Diesel-range TPH was detected in groundwater samples collected from three of the four monitoring wells at concentrations ranging from 59 to 780 micrograms per liter ( $\mu$ g/L). No measurable concentration of diesel-range TPH was detected in the groundwater sample collected from EHSI-MW3. A lube oil-range TPH concentration of 280  $\mu$ g/L was detected in the groundwater sample from EHSI-MW2; no measureable concentrations of lube oil-range TPH were detected in groundwater from the remaining three wells.

Benzene was detected in the groundwater sample collected from EHSI-MW2 at a concentration of 5.1  $\mu$ g/L. Vinyl chloride was detected in groundwater samples collected from wells EHSI-MW1 (2.7  $\mu$ g/L), EHSI-MW2 (0.97  $\mu$ g/L), and EHSI-MW4 (0.26  $\mu$ g/L). Two VOCs that are biodegradation-related compounds to vinyl chloride (trans-1,2-dichloroethene and cis-1,2-dichloroethene) also were detected in the sample collected from EHSI-MW1. Five VOCs that are constituents commonly associated with petroleum products were detected in the sample collected from well EHSI-MW-2. No VOCs were detected above laboratory reporting limits in the groundwater sample collected from EHSI-MW3.

Between three and six non-carcinogenic PAHs were detected in groundwater samples collected from wells EHSI-MW1 and EHSI-MW2. Chrysene, a carcinogenic PAH compound, was detected in the groundwater sample collected from EHSI-MW1 at a concentration of 0.13  $\mu$ g/L. Because none of the six remaining carcinogenic PAH compounds were detected in this sample, the concentration for total carcinogenic PAHs was calculated at 0.0013  $\mu$ g/L using the toxicity equivalency factor (TEF).

Dissolved arsenic was detected in groundwater samples from all four wells at concentrations ranging from 1.17 to 11.6  $\mu$ g/L. Dissolved total chromium was detected in the groundwater sample collected from well EHSI-MW2 at a concentration of 1.42  $\mu$ g/L; no measureable concentrations of dissolved total chromium were detected in groundwater from the remaining

three wells. Dissolved copper was detected in groundwater from three of the four wells at concentrations ranging from 1.01 to 4.07  $\mu$ g/L; copper was not detected above laboratory reporting limit in the sample collected from EHSI-MW4. Dissolved nickel was detected in groundwater samples from all four wells at concentrations ranging from 1.25 to 2.32  $\mu$ g/L. Dissolved zinc also was detected in groundwater samples from all four wells at concentrations ranging from 2.86 to 7.25  $\mu$ g/L. No dissolved cadmium, lead, or mercury was detected in any of the four groundwater samples submitted for analysis.

Copies of the laboratory analytical report associated with the groundwater samples collected from the four monitoring wells EHSI-MW1 through EHSI-MW4 are provided in Appendix A.

#### 9.5 GROUNDWATER REGULATORY REVIEW

The groundwater sample analytical results were compared to the MTCA Method A and B Cleanup Levels (WAC 173-340-745) for Unrestricted Land Uses. State regulators and environmental professionals use MTCA Cleanup Levels to compare levels of contamination in groundwater. MTCA Cleanup Levels are the concentrations standards where (if exceeded) the State of Washington regulators judge a groundwater sample to be contaminated.

The groundwater sample collected from monitoring well EHSI-MW2 had a diesel-range TPH concentration of 780  $\mu g/L$ , which exceeded the MTCA Method A Groundwater Cleanup Level of 500  $\mu g/L$ . The diesel-range TPH concentration detected in samples collected from EHSI-MW1 (59  $\mu g/L$ ) and EHSI-MW4 (370  $\mu g/L$ ) were below the MTCA Method A Groundwater Cleanup Level. The lube oil-range TPH concentration of 280  $\mu g/L$  detected in groundwater collected from EHSI-MW2 was below the MTCA Method A Groundwater Cleanup Level of 500  $\mu g/L$  for lube oil in groundwater.

The benzene concentration detected in the groundwater sample collected from EHSI-MW2 (5.1  $\mu g/L$ ) exceeded the MTCA Method A Groundwater Cleanup Level of 5  $\mu g/L$ . The vinyl chloride concentrations detected in samples collected from three of the four monitoring wells (ranging from 0.26 to 2.7  $\mu g/L$ ) exceeded the MTCA Method A Groundwater Cleanup Level of 0.2  $\mu g/L$ . The two vinyl chloride-related VOCs detected in the sample collected from EHSI-MW1 and the five VOCs detected in the sample collected from EHSI-MW2 were at concentrations below their applicable MTCA Method B Groundwater Cleanup Levels.

No established regulatory cleanup levels are available for the six non-carcinogenic PAHs detected in groundwater samples collected from EHSI-MW1 and EHSI-MW2. Chrysene, a carcinogenic PAH compound, was detected in the groundwater sample collected from EHSI-MW1 at a concentration (0.13  $\mu$ g/L). Because none of the remaining six carcinogenic PAH compounds were detected in the sample from EHSI-MW1, the total carcinogenic PAH concentration was calculated at 0.0013  $\mu$ g/L using the TEF calculation. This total carcinogenic PAH concentration was below the MTCA Method A Groundwater Cleanup Level of 0.1  $\mu$ g/L established for total carcinogenic PAHs in groundwater.

Dissolved arsenic was detected in a groundwater sample collected from EHSI-MW2 (11.6  $\mu$ g/L) at a concentration that exceeded the MTCA Method A Groundwater Cleanup Level of 5  $\mu$ g/L established for arsenic in groundwater. None of the other detected dissolved metal concentrations in all four groundwater samples exceeded their applicable MTCA Method A or B Groundwater Cleanup Levels.

#### 10.0 CONTAMINATED SOIL REMOVAL AND SITE ASSESSMENT CONCLUSIONS

EHSI supervised the removal of 1,018 tons of contaminated soils from three excavations identified by recent field investigation across the parking lot west of Federal Center South Building 1202. In addition to contaminated soils, buried oil drums and cans, plus medical/pharmaceutical waste encountered in the Southwest Excavation were separated from contaminated soil, characterized, and transported off-site for disposal and recycling. Based on visual observations and confirmation from soil analytical testing, all three excavations at Federal Center South are free of diesel- to lube oil-range TPH and VOCs contaminated soil.

No diesel contamination in soil was detected in samples collected from the four soil borings (SB7 through SB10) advanced in 40-foot centers from boring HCB-5 and within the proposed building footprint. However, diesel contamination was detected in soil samples collected within the water table in test pit TP8, and noted in soil based on field screening results within the water table at test pits TP7 and TP9.

Four groundwater monitoring wells EHSI-MW1 through EHSI-MW4 were installed around the perimeter of Building 1202. An oily sheen and petroleum-like odor were noted in soil samples collected in fine-grained sand within the water table during drilling and soil sampling of well boring EHSI-MW2 located in the alley between Buildings 1201 and 1202. An oily sheen on the water surface also was noted during well development of monitoring well EHSI-MW2. Analytical results of the groundwater sample collected from well EHSI-MW2 confirmed that diesel and lube oil contamination exist in the vicinity. Vinyl chloride was detected in groundwater from three of the four monitoring wells at concentrations exceeded the MTCA Method A Groundwater Cleanup Level of  $0.2~\mu g/L$  (no vinyl chloride was detected in the groundwater sample collected from the southwest corner at well EHSI-MW3). The presence of vinyl chloride in groundwater confirmed the analytical results of the sample collected and analyzed from HC monitoring well HCMW-3. A dissolved arsenic concentration that exceeded the MTCA Method A Groundwater Cleanup Level of  $5~\mu g/L$  was detected in the groundwater sample collected from well EHSI-MW2.

#### 11.0 VAPOR INTRUSION SCREENING

Potential petroleum hydrocarbon contamination was identified in subsurface soil boring HCB-5, located within the foot print of the new Federal Center South building (Figure 2). Analyses of test pit soil samples from this area indicated that diesel-range petroleum hydrocarbons in excess of the MTCA Method A Cleanup Levels for Unrestricted Land Uses were present in an area that by design would be below the planned footprint of the new Federal Center South building. The MTCA Unrestricted Land Use Soil Cleanup Standards for Soil Vapors (WAC 173-340-740(C)) exempt the evaluation of soil vapor pathway whenever diesel-range TPH concentrations are below the threshold concentration of 10,000 mg/kg. However, a review of the Ecology Guidance for Evaluating Soil Vapor Intrusion in Washington State: Investigation and Remedial Action (Ecology Publication Number 09-09-047), Section 3.1.3 (Tier I: Using Soil Gas Concentration Data) indicates that soil gas assessments are warranted in locations where the water table is less than 15 feet bgs and where there has been an exceedance of MTCA Cleanup Levels.

Soil vapor sampling was conducted on September 27, 2010, under the direction of an EHSI field geologist. Soil vapor samples were collected by driving a stainless steel soil vapor probe equipped with a retractable tip to the target sampling depth (between 5.5 and 6.5 feet

bgs) using direct-push drilling equipment. A total of three samples were collected in Tedlar bags and submitted under chain-of-custody protocol to ESN Northwest laboratory in Bellevue, Washington, for analysis of individual VOCs (including BTEX) using U.S. EPA Test Method 8260 (soil gas samples AP-1 through AP-3).

Indicator hazardous substances are the specific chemicals or compounds associated with a release that pose a potential threat to human health or the environment. For the future Federal Center South Building site, potential IHSs were selected based on the diesel-range hydrocarbons detected in soil samples collected from the site. Table 7 (attached) provides a summary of the potential IHSs, which include both individual VOCs and TPH fractions that were either detected in laboratory samples and/or are listed in Table 830-1 of the MTCA Cleanup Regulation Chapter 173-340-900. Only those compounds in Table 830-1 that are associated with diesel-range organics releases are included as potential IHSs. The potential IHSs for this site (listed on Table 7) are the VOCs benzene; toluene; ethylbenzene; and xylenes.

#### 11.1 VAPOR INTRUSION SCREENING RESULTS

Laboratory results indicated that VOCs in all three samples analyzed by U.S. EPA Method 8260 were below laboratory method reporting limits (MRLs). The U.S. EPA Method 8260 MRLs ranged from less than 10 to less than 100 micrograms per cubic meter ( $\mu g/m^3$ ) for each of the individual VOCs.

#### 11.2 VAPOR INTRUSION SCREENING CONCLUSIONS

The potential for concentrations of IHSs to exceed indoor air cleanup levels in the new building was evaluated in two steps consistent with the approach identified in the MTCA cleanup regulations (WAC 173-340-740(3)(c)(iv)(B)). However, there were no detections of BTEX compounds in concentrations above the test method detection limits (Table 7). On the basis of the absence of IHSs in the vadose soils located within the planned footprint of the new Federal Center South building, EHSI concluded that there is no likelihood that VOCs in soil vapor beneath the future Federal Center South building will cause an unacceptable risk to the future building occupants.

#### 12.0 RECOMMENDATIONS

All readily identifiable and documented chemical contamination liabilities were mitigated from the three excavation areas at Federal Center South parking lot west of Building 1202. Further environmental work involving groundwater monitoring and sampling is recommended at the Federal Center South parking lot to assess for the reduction of contaminant concentrations in groundwater following source removal.

#### 13.0 REFERENCES

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#### 14.0 **SIGNATURES**

The undersigned prepared the Interim Soil Remediation and Site Assessment Final Report.



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Miguel A. Ortega, L.G.

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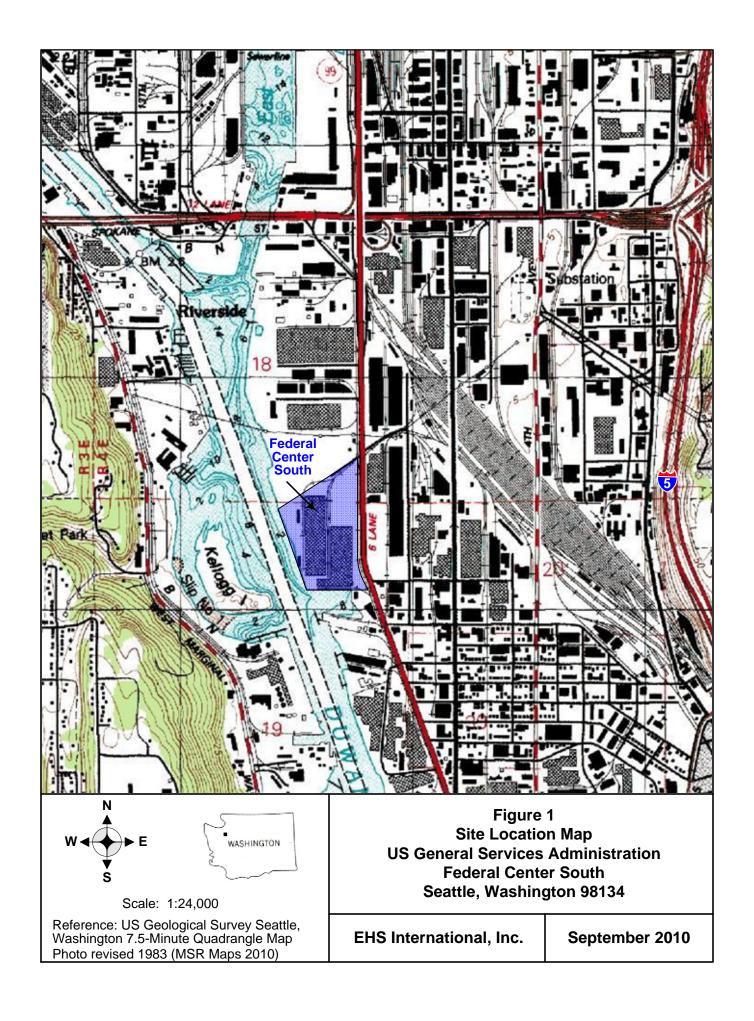
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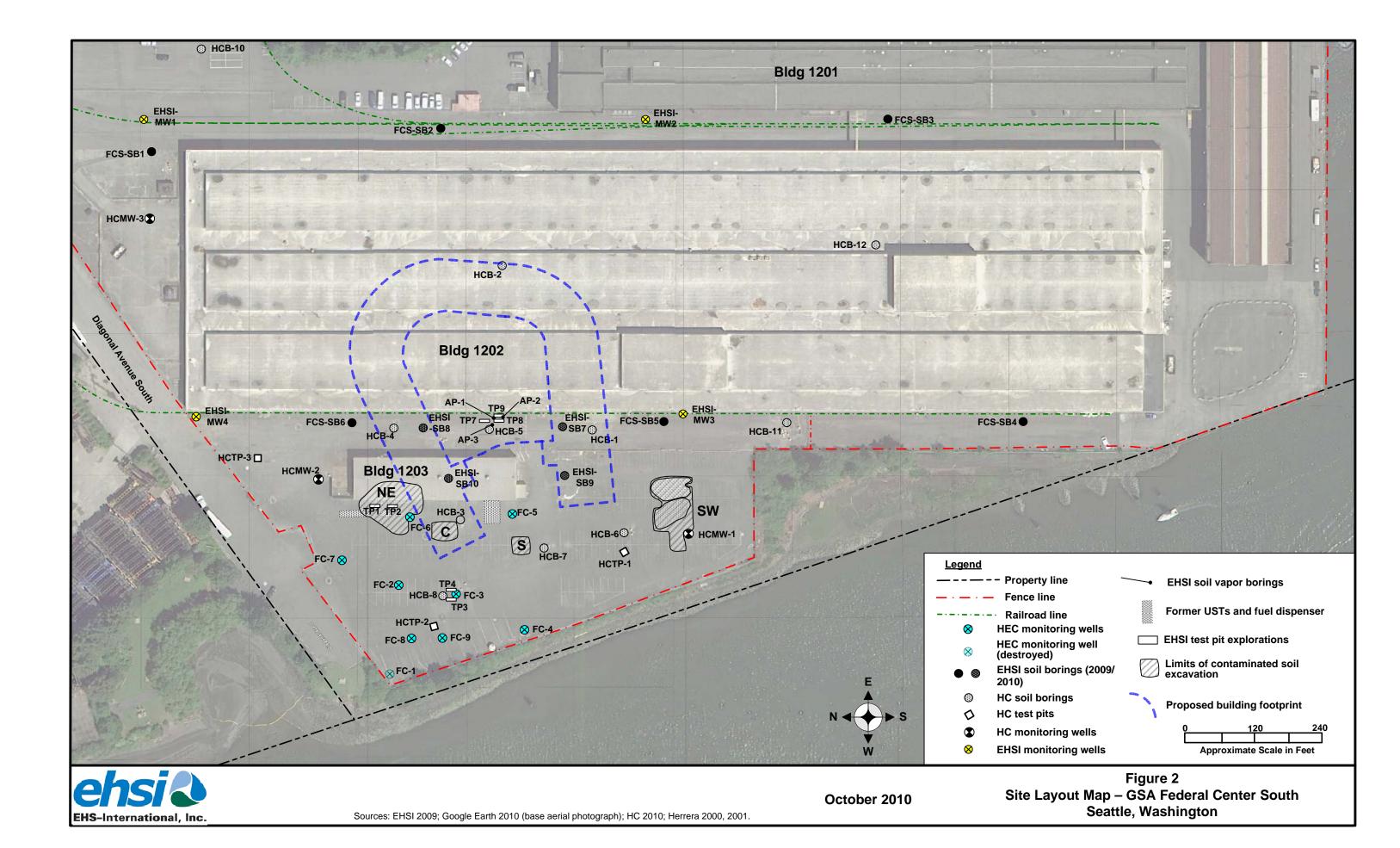
#### **PROJECT LIMITATIONS** 15.0

The conclusions presented in report are professional opinions based upon our visual field observations and chemical analyses at the Federal Center South property. This report is intended exclusively for the purpose outline herein and at the site location and project indicated. This report is for the sole use of our client, GSA. Opinions and conclusions presented herein apply to site conditions existing at the time of execution of our Federal Center South Interim Soil Remediation and Site Assessment and do not necessarily apply to future changes or other prior conditions at the site of which EHSI is not aware and has not had the opportunity to evaluate. The scope of services performed in execution of this Interim Soil Remediation and Site Assessment may not be appropriate to satisfy the needs of other users, and any use or re-use of the document or the findings, conclusions, or recommendations presented is at the sole risk of the said user.

EHSI's objective is to perform our work with care, exercising the customary thoroughness and competence of environmental consulting professionals in the relevant disciplines. Furthermore, we carried out our services in accordance with the standard for professional services by a consulting firm at the time those services were rendered. It is important to recognize that even the most comprehensive scope of services may fail to detect environmental liability on a particular site. Therefore, EHSI cannot act as insures and cannot "certify or underwrite" that a site is totally free of environmental liability. In addition, no expressed or implied representation or warranty is included or intended in our report except that our work was performed within the limits prescribed by our client, and with the customary thoroughness and competence of our profession.

#### **FIGURES**





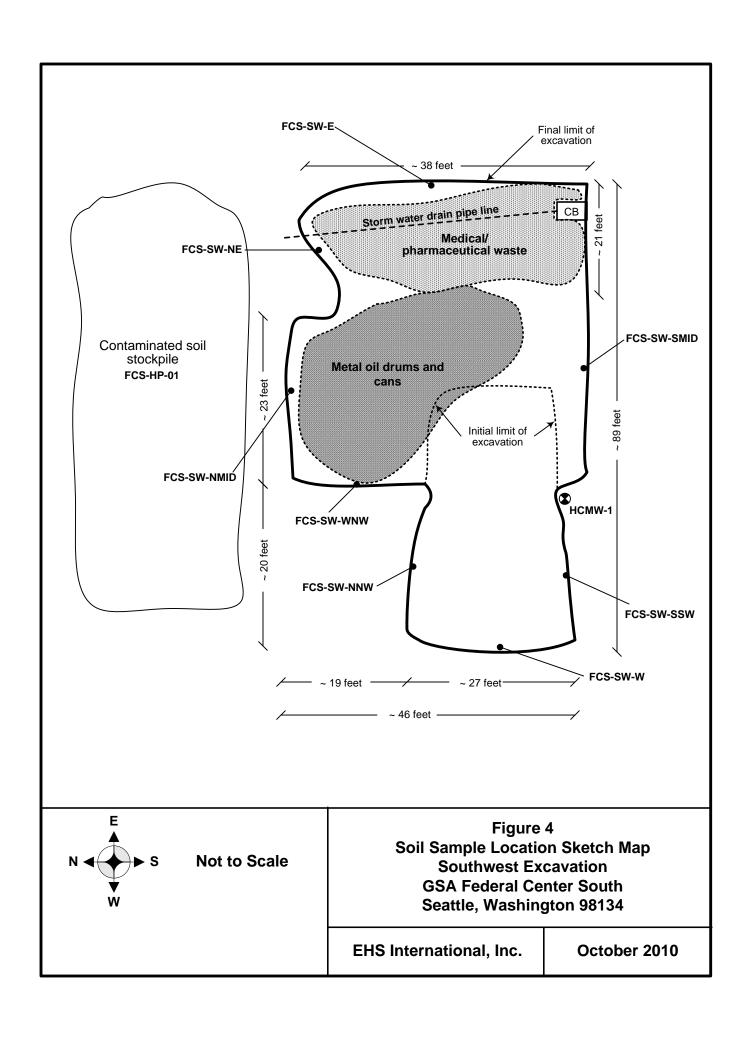
#### **Central Excavation** FC-CE-NSW1 [Dx - ND]Overburden Soil storm water drain pipe Stockpile #1 [Dx - ND]Bottom of excavation = 25 feet 6 feet bgs (groundwater) FC-CE-ESW1 FC-CE-WSW1 [Dx - ND][Dx – ND] **Overburden Soil** Stockpile #2 [Dx - ND]FC-CE-SSW1 [Dx - ND]~ 14 feet -**South Excavation** FC-SE-NSW1 [Dx - ND]Bottom of ~ 10 feet excavation = FC-SE-ESW1 6 feet bas [Dx - ND](groundwater) FC-SE-SSW1 [Dx - ND]FC-SE-WSW1/ ~ 10 feet — [Dx - ND]**Overburden Soil** Stockpile #3 [Dx - ND]Figure 3 **Soil Sample Location Sketch Map** Not to Scale **Central and South Excavations GSA Federal Center South** Seattle, Washington 98134 Notes:

EHS International, Inc.

October 2010

Dx = Diesel- and lube oil-range TPH

ND = Not detected above lab reporting limits (diesel = 50 ppm; lube oil = 250 ppm).



**TABLES** 

# TABLE 1: SAMPLE SOURCE INFORMATION INTERIM SOIL REMEDIATION AND SITE ASSESSMENT FEDERAL CENTER SOUTH, SEATTLE, WASHINGTON

SOIL SAMPLE	SOURCE LOCATION	SAMPLE DEPTH (FEET BGS <sup>1</sup> )
FC-CE-NSW1	Grab soil sample from the north sidewall of the Central Excavation	5
FC-CE-ESW1	Grab soil sample from the east sidewall of the Central Excavation	5
FC-CE-SSW1	Grab soil sample from the south sidewall of the Central Excavation	5
FC-CE-WSW1	Grab soil sample from the west sidewall of the Central Excavation	5
FC-CE-SP1	Composited soil sample from the excavated overburden soil stockpile #1 from the Central Excavation	0.5 (6 inches)
FC-CE-SP2	Composited soil sample from the excavated overburden soil stockpile #2 from the Central Excavation	0.5 (6 inches)
FC-SE-NSW1	Grab soil sample from the north sidewall of the South Excavation	5
FC-SE-ESW1	Grab soil sample from the east sidewall of the South Excavation	5
FC-SE-SSW1	Grab soil sample from the south sidewall of the South Excavation	5
FC-SE-WSW1	Grab soil sample from the west sidewall of the South Excavation	5
FC-SP-3	Composited soil sample from the excavated overburden soil stockpile #3 from the South Excavation	0.5 (6 inches)
FCS-SW-SSW	Grab soil sample from the south-southwest corner and sidewall of the Southwest Excavation	6
FCS-SW-W	Grab soil sample from the west sidewall of the Southwest Excavation	6

# TABLE 1: SAMPLE SOURCE INFORMATION INTERIM SOIL REMEDIATION AND SITE ASSESSMENT FEDERAL CENTER SOUTH, SEATTLE, WASHINGTON

SOIL SAMPLE	SOURCE LOCATION	SAMPLE DEPTH (FEET BGS <sup>1</sup> )
FCS-SW-NNW	Grab soil sample from the north-northwest corner and sidewall of the Southwest Excavation	6
FCS-SW-WNW	Grab soil sample from the west-northwest corner and sidewall of the Southwest Excavation	6
FCS-SW-NMID	Grab soil sample from the north middle sidewall of the Southwest Excavation	6
FCS-SW-SMID	Grab soil sample from the south middle sidewall of the Southwest Excavation	6
FCS-SW-SE	Grab soil sample from the southeast corner and sidewall of the Southwest Excavation	6
FCS-SW-E	Grab soil sample from east sidewall of the Southwest Excavation	6
FCS-SW-NE	Grab soil sample from northeast corner and sidewall of the Southwest Excavation	6
FCS-HP-01	Composited soil sample from the excavated contaminated soil stockpile HP of the Southwest Excavation	0.5 (6 inches)
FCS-SB7-5	Soil sample collected within the vadose zone above the water table from soil boring 7	5
FCS-SB8-5	Soil sample collected within the vadose zone above the water table from soil boring 8	5
FCS-SB9-4.5	Soil sample collected within the vadose zone above the water table from soil boring 9	4.5
FCS-SB10-4.5	Soil sample collected within the vadose zone above the water table from soil boring 10	4.5
FCS-TP7-6	Grab soil sample collected within the vadose zone above the water table from test pit 7	6

# TABLE 1: SAMPLE SOURCE INFORMATION INTERIM SOIL REMEDIATION AND SITE ASSESSMENT FEDERAL CENTER SOUTH, SEATTLE, WASHINGTON

SOIL SAMPLE	SOURCE LOCATION	SAMPLE DEPTH (FEET BGS <sup>1</sup> )
FCS-TP8-5	Grab soil sample collected within the vadose zone above the water table from test pit 8	5
FCS-TP8-6.5	Grab soil sample collected within the water table from test pit 8	6.5
FCS-TP9-6.5	Grab soil sample collected within the water table from test pit 9	6.5

#### **EXPLANATION**

<sup>&</sup>lt;sup>1</sup>BGS – below ground surface.

# TABLE 2: MAP COORDINATES INFORMATION<sup>1</sup> INTERIM SOIL REMEDIATION AND SITE ASSESSMENT FEDERAL CENTER SOUTH, SEATTLE, WASHINGTON

SITE FEATURE	LATITUDE	LONGITUDE
<b>HEC Monitoring Wells<sup>2</sup></b>		
FC1 <sup>3</sup>	47° 33.603' N	122° 20.644' W
FC2	47° 33.605' N	122° 20.612' W
FC3	47° 33.587' N	122° 20.616' W
FC4	47° 33.575' N	122° 20.629' W
FC5	47° 33.577' N	122° 20.595' W
FC6	47° 33.600′ N	122° 20.597' W
FC7	47° 33.612' N	122° 20.612' W
FC8	47° 33.603' N	122° 20.629' W
FC9	47° 33.593' N	122° 20.629' W
EHSI 2009 Soil Borings <sup>4</sup>		<u>'</u>
FCS-SB1	47° 33.646′ N	122° 20.496′ W
FCS-SB2	47° 33.593' N	122° 20.483' W
FCS-SB3	47° 33.518' N	122° 20.483' W
FCS-SB4	47° 33.482' N	122° 20.570' W
FCS-SB5	47° 33.552' N	122° 20.569' W
FCS-SB6	47° 33.610′ N	122° 20.568' W
HC 2010 Soil Borings <sup>5</sup>		·
HCB-1	47° 33.563' N	122° 20.571' W
HCB-2	47° 33.582' N	122° 20.522' W
HCB-3	47° 33.590' N	122° 20.596' W
HCB-4	47° 33.602' N	122° 20.570' W
HCB-5	47° 33.582' N	122° 20.571' W
HCB-6	47° 33.557' N	122° 20.599' W
HCB-7	47° 33.572' N	122° 20.604' W
HCB-8	47° 33.589' N	122° 20.617' W
HCB-9 <sup>6</sup>	47° 33.679' N	122° 20.417' W
HCB-10	47° 33.638' N	122° 20.462' W
HCB-11	47° 33.529' N	122° 20.570' W
HCB-12	47° 33.510′ N	122° 20.518' W

# TABLE 2: MAP COORDINATES INFORMATION<sup>1</sup> INTERIM SOIL REMEDIATION AND SITE ASSESSMENT FEDERAL CENTER SOUTH, SEATTLE, WASHINGTON

SITE FEATURE	LATITUDE	LONGITUDE
HC 2010 Test Pit Explorations <sup>5</sup>		
HCTP-1	47° 33.558' N	122° 20.605' W
HCTP-2	47° 33.593' N	122° 20.625' W
HCTP-3	47° 33.626′ N	122° 20.579' W
HC 2010 Groundwater Monitor	ring Wells <sup>5</sup>	·
HCMW-1	47° 33.547' N	122° 20.600' W
HCMW-2	47° 33.615' N	122° 20.583' W
HCMW-3	47° 33.646′ N	122° 20.508' W
EHSI Test Pit Explorations		·
TP1	47° 33.608' N	122° 20.592' W
TP2	47° 33.604' N	122° 20.592' W
TP3	47° 33.589′ N	122° 20.618' W
TP4	47° 33.589′ N	122° 20.616' W
TP7 <sup>7</sup>	47° 33.583' N	122° 20.570' W
TP8	47° 33.581' N	122° 20.570' W
TP9	47° 33.581' N	122° 20.568' W
Central Excavation (CE)		
Northwest corner	47° 33.596' N	122° 20.600' W
Northeast corner	47° 33.596' N	122° 20.597' W
Southeast corner	47° 33.591' N	122° 20.597' W
Southwest corner	47° 33.591' N	122° 20.600' W
South Excavation (SE)		
Northwest corner	47° 33.580′ N	122° 20.608' W
Northeast corner	47° 33.580' N	122° 20.601' W
Southeast corner	47° 33.578' N	122° 20.601' W
Southwest corner	47° 33.578' N	122° 20.608' W
Southwest Excavation (SW)		
Northwest corner	47° 33.553' N	122° 20.600' W
Northeast corner	47° 33.553' N	122° 20.583' W
Southeast corner	47° 33.546' N	122° 20.583' W

## TABLE 2: MAP COORDINATES INFORMATION<sup>1</sup> INTERIM SOIL REMEDIATION AND SITE ASSESSMENT FEDERAL CENTER SOUTH, SEATTLE, WASHINGTON

	<u> </u>	
SITE FEATURE	LATITUDE	LONGITUDE
Southwest corner	47° 33.547' N	122° 20.606′ W
West-Northwest corner	47° 33.549' N	122° 20.606' W
East-Northwest corner	47° 33.549' N	122° 20.600' W
Northeast Excavation (NE)		
Northwest corner	47° 33.602' N	122° 20.599' W
North corner	47° 33.608' N	122° 20.594' W
Northeast corner	47° 33.605' N	122° 20.587' W
Southeast corner	47° 33.598' N	122° 20.587' W
South-Southwest corner	47° 33.598' N	122° 20.597' W
Southwest corner	47° 33.600' N	122° 20.599' W
EHSI Groundwater Monitori	ng Wells	
EHSI-MW1	47° 33.650' N	122° 20.485' W
EHSI-MW2	47° 33.562' N	122° 20.483' W
EHSI-MW3	47° 33.548' N	122° 20.569′ W
EHSI-MW4	47° 33.638' N	122° 20.569' W
EHSI Soil Borings		
EHSI-SB7	47° 33.571' N	122° 20.572' W
EHSI-SB8	47° 33.595' N	122° 20.570′ W
EHSI-SB9	47° 33.571' N	122° 20.583' W
EHSI-SB10	47° 33.591' N	122° 20.584′ W

#### **EXPLANATION**

Refer to Figure 2 – Site Layout Map, Federal Center South, for locations of site features.

<sup>&</sup>lt;sup>1</sup> The map coordinates for each site feature were obtained using Google Earth 2010 aerial photo of the Federal Center South Facility.

<sup>&</sup>lt;sup>2</sup> Herrera Environmental Consultants, Inc. (HEC) monitoring wells (Herrera 2000, 2001).

<sup>&</sup>lt;sup>3</sup> Well FC1 was destroyed sometime after 2002 (EHSI 2008).

<sup>&</sup>lt;sup>4</sup> EHSI soil borings advanced onsite in 2009 (EHSI 2009).

<sup>&</sup>lt;sup>5</sup> Hart Crowser (HC) soil borings, test pit explorations, and groundwater monitoring wells installed onsite in May 2010.

<sup>&</sup>lt;sup>6</sup> Soil boring HCB-9 is not shown on Figure 2. This soil boring was advanced in the parking lot within the northeast corner of the Federal Center South property.

<sup>&</sup>lt;sup>7</sup> There is no test pit explorations TP5 and TP6.

#### TABLE 3: CLOSURE AND STOCKPILE SOIL SAMPLES ANALYTICAL RESULTS NWTPH Dx1 CENTRAL AND SOUTH EXCAVATIONS INTERIM SOIL REMEDIATION AND SITE ASSESSMENT FEDERAL CENTER SOUTH, SEATTLE, WASHINGTON

SAMPLE	SOURCE LOCATION	DIESEL-RANGE HYDROCARBONS (mg/kg) <sup>2</sup>	LUBE OIL-RANGE HYDROCARBONS (mg/kg)
FC-CE-NSW1	North sidewall of the Central Excavation, at a depth of 5 feet bgs	$ND^3$	ND
FC-CE-ESW1	East sidewall of the Central Excavation, at a depth of 5 feet bgs	ND	ND
FC-CE-SSW1	South sidewall of the Central Excavation, at a depth of 5 feet bgs	ND	ND
FC-CE-WSW1	West sidewall of the Central Excavation, at a depth of 5 feet bgs	ND	ND
FC-CE-SP1	Excavated overburden soil stockpile #1 from the Central Excavation	ND	ND
FC-CE-SP2	Excavated overburden soil stockpile #2 from the Central Excavation	ND	ND
FC-SE-NSW1	North sidewall of the South Excavation, at a depth of 5 feet bgs	ND	ND
FC-SE-ESW1	East sidewall of the South Excavation, at a depth of 5 feet bgs	ND	ND
FC-SE-SSW1	South sidewall of the South Excavation, at a depth of 5 feet bgs	ND	ND
FC-SE-WSW1	West sidewall of the South Excavation, at a depth of 5 feet bgs	ND	ND
FC-SP-3	Excavated overburden soil stockpile #3 from the South Excavation	ND	ND

#### **EXPLANATION**

<sup>&</sup>lt;sup>1</sup>Diesel- to heavy oil-range TPH (Ecology Test Method NWTPH-Dx).

<sup>2</sup>Analytical values reported in milligrams per kilograms (mg/kg) on a dry-weight basis - parts per million (ppm).

<sup>3</sup>ND - Not Detected, below test method detection limits – Diesel (50 ppm) and Lube Oil (250 ppm).

# TABLE 4: CLOSURE AND STOCKPILE SOIL SAMPLES ANALYTICAL RESULTS SOUTHWEST EXCAVATION INTERIM SOIL REMEDIATION AND SITE ASSESSMENT FEDERAL CENTER SOUTH, SEATTLE, WASHINGTON

ANALYTE	MTCA METHOD A/B SOIL CLEANUP LEVELS <sup>1</sup>	FCS-SW- SSW	FCS-SW-W	FCS-SW- NNW	FCS-SW- WNW	FCS-SW- NMID	FCS-SW- SMID	FCS-SW- SE	FCS-SW-E	FCS-SW- NE	FCS-HP-01
<sup>2</sup> Gasoline-range hydrocarbons (mg/kg)	30/100 <sup>2</sup>	$ND^{10}$	ND	ND	ND	ND	ND	ND	ND	ND	36
<sup>3</sup> Diesel-range hydrocarbons (mg/kg)	2,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	66
<sup>3</sup> Heavy oil-range hydrocarbons (mg/kg)	2,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	400
<sup>4</sup> Benzene 8021B (mg/kg)	0.03										ND
<sup>4</sup> Toluene 8021B (mg/kg)	7										ND
<sup>4</sup> Ethylbenzene 8021B (mg/kg)	6										0.08
<sup>4</sup> Xylenes 8021B (mg/kg)	9										0.60
<sup>5</sup> VOCs 8260C (mg/kg)											
Benzene	0.03	ND	ND-	ND-	ND-	ND-	ND-	ND-	ND-	ND	ND
Toluene	7	ND	ND-	ND-	ND-	ND-	ND-	ND-	ND-	ND	ND
Ethylbenzene	6	ND	ND-	ND-	ND-	ND-	ND-	ND-	ND-	ND	ND
Xylenes	9	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.25
Trichloroethylene	0.03	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.037
Isopropylbenzene	na	ND	ND	ND	ND	ND	ND	ND	ND	ND	790
2-Chlorobenzene	na	ND	ND	ND	ND	ND	ND	ND	ND	ND	270
1,3,5-Trimethylbenzene	na	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.15
1,2,4-Trimethylbenzene	na	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.56
p-Isopropyltoluene	na	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.077
Naphthalene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2
<sup>6</sup> PAHs 8270D SIM (mg/kg)											
Naphthalene	5	ND	ND	0.049	0.048	0.013	ND	ND	ND	ND	0.036
Fluorene	na	ND	ND	ND	ND	0.033	ND	ND	ND	ND	0.088
Acenaphthene	na	ND	ND	ND	ND	0.11	ND	ND	ND	ND	0.33
Phenanthrene	na	ND	ND	ND	ND	0.036	ND	ND	ND	ND	0.06
Anthracene	na	ND	ND	ND	ND	0.010	ND	ND	ND	ND	0.016
Fluoranthene	na	ND	ND	ND	ND	0.021	ND	ND	ND	ND	0.023
Pyrene	na	ND	ND	ND	ND	0.015	ND	ND	ND	ND	0.016
cPAHs	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<sup>7</sup> PCBs 8082A (mg/kg)	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

# TABLE 4: CLOSURE AND STOCKPILE SOIL SAMPLES ANALYTICAL RESULTS SOUTHWEST EXCAVATION INTERIM SOIL REMEDIATION AND SITE ASSESSMENT FEDERAL CENTER SOUTH, SEATTLE, WASHINGTON

ANALYTE	MTCA METHOD A/B SOIL CLEANUP LEVELS <sup>1</sup>	FCS-SW- SSW	FCS-SW-W	FCS-SW- NNW	FCS-SW- WNW	FCS-SW- NMID	FCS-SW- SMID	FCS-SW- SE	FCS-SW-E	FCS-SW- NE	FCS-HP-01
<sup>8</sup> RCRA Metals (mg/kg)											
Arsenic	20	1.29	ND	1.45	ND	2.05	1.79	11.6	1.01	3.73	2.27
Barium	16,000	9.11	8.14	9.43	8.05	9.39	10.1	10.4	8.31	10.7	19.1
Cadmium	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	19/2,000°	4.65	4.47	4.95	5.50	5.05	5.68	6.04	5.75	4.78	7.08
Lead	250	ND	ND	1.97	ND	1.02	1.70	1.19	1.16	176	4.81
Mercury	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Selenium	400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

#### **EXPLANATION**

Analytical values reported in milligrams per kilograms (mg/kg) on a dry-weight basis – parts per million (ppm).

Analytical value shown in **boldface** type indicates detected contaminant exceeds regulatory cleanup level.

<sup>--</sup> Sample was not analyzed for this constituent.

<sup>&</sup>lt;sup>1</sup> EcologyMTCA Method A Soil Cleanup Levels for Unrestricted Land Uses and MTCA Method B Soil Cleanup Levels for Unrestricted Land Uses (direct contact only) (Ecology 2007).

<sup>&</sup>lt;sup>2</sup> Ecology Test Method NWTPH-Gx; Method A soil cleanup level for gasoline-range TPH based on benzene / no benzene present in the soil.

<sup>&</sup>lt;sup>3</sup> Ecology Test Method NWTPH-Dx (diesel- to lube oil-range TPH).

<sup>&</sup>lt;sup>4</sup>U.S. EPA Test Method 8021B for benzene, toluene, ethylbenzene, and xylenes.

<sup>&</sup>lt;sup>5</sup>U.S. EPA Test Method 8260C for volatile organic compounds (VOCs).

<sup>&</sup>lt;sup>6</sup>U.S. EPA Test Method 8270D SIM for polycyclic aromatic hydrocarbons (PAHs) by selective ion monitoring (SIM) process.

<sup>&</sup>lt;sup>7</sup>U.S. EPA Test Method 8082A for polychlorinated biphenyls (PCBs).

<sup>&</sup>lt;sup>8</sup>U.S. EPA Test Method 200.8 for RCRA metals (i.e., arsenic, barium, cadmium, chromium, lead, selenium, and silver) and U.S. EPA Test Method 1631E for mercury in soil.

<sup>&</sup>lt;sup>9</sup> MTCA Method A soil cleanup level for hexavalent chromium (VI) / chromium III.

<sup>&</sup>lt;sup>10</sup>ND - Not Detected, below test method detection limits – Gasoline (2 ppm); Diesel (50 ppm); Lube Oil (250 ppm); Benzene, Toluene, and Ethylbenzene (0.02 ppm); Xylenes (0.06 ppm); VOCs (0.25-0.5 ppm range); PAHs (0.01 ppm); PCBs (0.1 ppm); RCRA metals (1 ppm); Mercury (0.2 ppm).

#### TABLE 5: SOIL SAMPLES ANALYTICAL RESULTS NWTPH Dx1 SOIL BORINGS SB7-SB10 AND TEST PITS TP7-TP9 INTERIM SOIL REMEDIATION AND SITE ASSESSMENT FEDERAL CENTER SOUTH, SEATTLE, WASHINGTON

SAMPLE	SOURCE LOCATION	DIESEL-RANGE HYDROCARBONS (mg/kg) <sup>2</sup>	LUBE OIL-RANGE HYDROCARBONS (mg/kg)
FCS-SB7-5	Within the vadose zone above the water table from soil boring 7, at a depth of 5 feet bgs	ND	ND
FCS-SB8-5	Within the vadose zone above the water table from soil boring 8, at a depth of 5 feet bgs	ND	ND
FCS-SB9-4.5	Within the vadose zone above the water table from soil boring 9, at a depth of 4.5 feet bgs	ND	ND
FCS-SB10-4.5	Within the vadose zone above the water table from soil boring 10, at a depth of 4.5 feet bgs	ND	ND
FCS-TP7-6	Within the vadose zone above the water table from test pit 7, at a depth of 6 feet bgs	ND	ND
FCS-TP8-5	Within the vadose/capillary zone above the water table from test pit 8, at a depth of 5 feet bgs	90	ND
FCS-TP8-6.5	Within the water table from test pit 8, at a depth of 6.5 feet bgs	4,700	290
FCS-TP9-6.5	Within the water table from test pit 9, at a depth of 6.5 feet bgs	ND	ND
MTCA Method A	Soil Cleanup Levels for Unrestricted Land Uses (Ecology 2007)	2,000	2,000

#### **EXPLANATION**

Analytical value shown in **boldface** type indicates detected contaminant exceeds regulatory cleanup level.

<sup>&</sup>lt;sup>1</sup> Diesel- to heavy oil-range TPH (Ecology Test Method NWTPH-Dx).
<sup>2</sup> Analytical values reported in milligrams per kilograms (mg/kg) on a dry-weight basis - parts per million (ppm).

<sup>&</sup>lt;sup>3</sup>ND - Not Detected, below test method detection limits – Diesel (50 ppm) and Lube Oil (250 ppm).

# TABLE 6: GROUNDWATER ANALYTICAL RESULTS MONITORING WELLS EHSI-MW1 THROUGH EHSI-MW4 INTERIM SOIL REMEDIATION AND SITE ASSESSMENT FEDERAL CENTER SOUTH, SEATTLE, WASHINGTON

ANALYTE	MTCA METHOD A/B GROUNDWATER CLEANUP LEVELS <sup>1</sup>	EHSI-MW1	EHSI-MW2	EHSI-MW3	EHSI-MW4
<sup>2</sup> Gasoline-range hydrocarbons (μg/L)	800 / 1,000 2	ND <sup>7</sup>	ND	ND	ND
<sup>3</sup> Diesel-range hydrocarbons (µg/L)	500	59	780	ND	370
<sup>3</sup> Heavy oil-range hydrocarbons (µg/L)	500	ND	280	ND	ND
<sup>4</sup> VOCs 8260C (μg/L)					
Benzene	5	ND	5.1	ND	ND
Toluene	1,000	ND	ND	ND	ND
Ethylbenzene	700	ND	ND	ND	ND
Xylenes	1,000	ND	ND	ND	ND
Vinyl Chloride	0.2	2.7	0.97	ND	0.26
Trans-1,2-Dichloroethene	160	1.5	ND	ND	ND
Cis-1,2-Dichloroethene	80	14	ND	ND	ND
1,1-Dichloroethane	1,600	ND	2.0	ND	ND
Chlorobenzene	160	ND	3.5	ND	ND
2-Chlorotoluene	160	ND	2.0	ND	ND
1,2,4-Trimethylbenzene	400	ND	1.0	ND	ND
1,2-Dichlorobenzene	720	ND	2.6	ND	ND
<sup>5</sup> PAHs 8270D SIM (μg/L)					
Acenaphthene	na	1.1	ND	ND	ND
Fluorene	na	0.32	ND	ND	ND
Phenanthrene	na	0.96	0.15	ND	ND
Anthracene	na	0.17	ND	ND	ND

# TABLE 6: GROUNDWATER ANALYTICAL RESULTS MONITORING WELLS EHSI-MW1 THROUGH EHSI-MW4 INTERIM SOIL REMEDIATION AND SITE ASSESSMENT FEDERAL CENTER SOUTH, SEATTLE, WASHINGTON

ANALYTE	MTCA METHOD A/B GROUNDWATER CLEANUP LEVELS <sup>1</sup>	EHSI-MW1	EHSI-MW2	EHSI-MW3	EHSI-MW4
Fluoranthene	na	1.0	0.15	ND	ND
Pyrene	па	0.96	0.15	ND	ND
Chrysene (cPAH)	na	0.13	ND	ND	ND
cPAHs (total)	0.1	0.0013	ND	ND	ND
<sup>6</sup> Priority Pollutants Dissolved Metals (µg.	/L)				
Arsenic	5	1.80	11.6	1.68	1.17
Cadmium	5	ND	ND	ND	ND
Chromium	50	ND	1.42	ND	ND
Copper	590	1.01	1.33	4.07	ND
Lead	15	ND	ND	ND	ND
Mercury	2	ND	ND	ND	ND
Nickel	320	1.36	2.05	1.25	2.32
Zinc	4,800	7.25	2.86	3.57	3.39

#### EXPLANATION

Analytical values reported in micrograms per liter ( $\mu g/L$ ) – parts per billion (ppb).

Analytical value shown in **boldface** type indicates detected contaminant exceeds regulatory cleanup level.

<sup>&</sup>lt;sup>1</sup> Ecology MTCA Method A and Method B Groundwater Cleanup Levels (Ecology 2007).

<sup>&</sup>lt;sup>2</sup> Ecology Test Method NWTPH-Gx; Method A groundwater cleanup level for gasoline-range TPH based on benzene / no benzene present in groundwater.

<sup>&</sup>lt;sup>3</sup> Ecology Test Method NWTPH-Dx (diesel- to heavy oil-range TPH).

<sup>&</sup>lt;sup>4</sup> U.S. EPA Test Method 8260C for volatile organic compounds (VOCs).

<sup>&</sup>lt;sup>5</sup>U.S. EPA Test Method 8270D for polycyclic aromatic hydrocarbons (PAHs) by selective ion monitoring (SIM) process.

<sup>&</sup>lt;sup>6</sup> U.S. EPA Test Method 200.8 for Priority Pollutants metals (i.e., arsenic, cadmium, chromium, copper, lead, nickel, and zinc) and U.S. EPA Test Method 1631E for mercury in groundwater.

<sup>&</sup>lt;sup>7</sup> ND - Not Detected, below test method detection limits – Gasoline (100 ppb); Diesel (50 ppb); Lube Oil (250 ppb); Benzene (0.35 ppb); Toluene, Ethylbenzene, and Xylenes (1.0 ppb); VOCs (0.2-10 ppb range); PAHs (0.1 ppb); PP metals (1 ppb); Mercury (0.2 ppb).

#### TABLE 7: SOIL VAPOR ANALYTICAL RESULTS VOCs<sup>1</sup> SOIL VAPOR SAMPLES AP-1 THROUGH AP-3 INTERIM SOIL REMEDIATION AND SITE ASSESSMENT FEDERAL CENTER SOUTH, SEATTLE, WASHINGTON

SAMPLE ID	BENZENE (mg/m³) <sup>2</sup>	TOLUENE (mg/m³)	ETHYLBENZENE (mg/m³)	XYLENES (mg/m³)
AP-1	ND <sup>3</sup>	ND	ND	ND
AP-2	ND	ND	ND	ND
AP-3	ND	ND	ND	ND

#### **EXPLANATION**

<sup>&</sup>lt;sup>1</sup>U.S. EPA Test Method 8260 for volatile organic compounds (VOCs).

<sup>&</sup>lt;sup>2</sup> Analytical values reported in milligrams per cubic meter (mg/m<sup>3</sup>).

<sup>&</sup>lt;sup>3</sup> ND - Not Detected, below test method detection limits – Benzene, Toluene, Ethylbenzene, and Xylenes (0.01 mg/m<sup>3</sup>).

APPENDIX A: LABORATORY ANALYTICAL REPORTS

#### **ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D. Charlene Morrow, M.S. Yelena Aravkina, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

August 9, 2010

Miguel Ortega, Project Manager EHS International 12810 NE 20<sup>th</sup> St, Ste 100 Bellevue, WA 98005

Dear Mr. Ortega:

Included are the results from the testing of material submitted on August 2, 2010 from the 10048-04 Federal Center South, F&BI 008009 project. There are 4 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures
NAA0809R.DOC

## FRIEDMAN & BRUYA, INC. ENVIRONMENTAL CHEMISTS

#### **CASE NARRATIVE**

This case narrative encompasses samples received on August 2, 2010 by Friedman & Bruya, Inc. from the EHS International 10048-04 Federal Center South, F&BI 008009 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	EHS International
008009-01	FC-CE-NSW1
008009-02	FC-CE-ESW1
008009-03	FC-CE-SSW1
008009-04	FC-CE-WSW1
008009-05	FC-CE-SP1
008009-06	FC-CE-SP2

All quality control requirements were acceptable.

#### ENVIRONMENTAL CHEMISTS

Date of Report: 08/09/10 Date Received: 08/02/10

Project: 10048-04 Federal Center South, F&BI 008009

Date Extracted: 08/03/10 Date Analyzed: 08/03/10

#### RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	$\frac{\text{Diesel Range}}{(C_{10}\text{-}C_{25})}$	Motor Oil Range (C <sub>25</sub> -C <sub>36</sub> )	Surrogate (% Recovery) (Limit 50-150)
FC-CE-NSW1 008009-01	<50	<250	79
FC-CE-ESW1 008009-02	<50	<250	79
FC-CE-SSW1	< 50	<250	79
FC-CE-WSW1 008009-04	< 50	<250	79
FC-CE-SP1 008009-05	<50	<250	77
FC-CE-SP2 008009-06	<50	<250	75
Method Blank <sub>00-1156 MB</sub>	<50	<250	81

## FRIEDMAN & BRUYA, INC. ENVIRONMENTAL CHEMISTS

Date of Report: 08/09/10 Date Received: 08/02/10

Project: 10048-04 Federal Center South, F&BI 008009

#### QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 008009-01 (Matrix Spike)

			(Wet wt)	Percent	Percent		
	Reporting	Spike	Sample	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	Result	MS	MSD	Criteria	(Limit 20)
Diesel Extended	mg/kg (ppm)	5.000	< 50	86	97	73-135	11

Laboratory Code: Laboratory Control Sample

			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Diesel Extended	mg/kg (ppm)	5,000	88	74-139

#### **ENVIRONMENTAL CHEMISTS**

#### **Data Qualifiers & Definitions**

- a The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- A1 More than one compound of similar molecule structure was identified with equal probability.
- b The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.
- c The presence of the analyte indicated may be due to carryover from previous sample injections.
- d The sample was diluted. Detection limits may be raised due to dilution.
- ds The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.
- dv Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.
- fb Analyte present in the blank and the sample.
- fc The compound is a common laboratory and field contaminant.
- hr The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.
- ht Analysis performed outside the method or client-specified holding time requirement.
- ip Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.
- j The result is below normal reporting limits. The value reported is an estimate.
- $\boldsymbol{J}$  The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.
- jr The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- js The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- lc The presence of the compound indicated is likely due to laboratory contamination.
- L The reported concentration was generated from a library search.
- nm The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc The sample was received in a container not approved by the method. The value reported should be considered an estimate.
- $\mbox{pr}$  The sample was received with incorrect preservation. The value reported should be considered an estimate.
- $ve-Estimated\ concentration\ calculated\ for\ an\ analyte\ response\ above\ the\ valid\ instrument\ calibration\ range.\ A\ dilution\ is\ required\ to\ obtain\ an\ accurate\ quantification\ of\ the\ analyte.$
- vo The value reported fell outside the control limits established for this analyte.
- x The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

08/02/10

Phone #(425)455. 2959 Fax # City, State, ZIP Bellevel, WA MCOS Address 1280 NE. 20th St. STE 100 Send Report To Miguel Ortega Company EHS Internations

PROJECT NAME/NO. REMARKS
(all Sencus) 219-0124 with results
\* 24 for, TAT PO#

Rush charges authorized by:	クタインタイプ語の対の	Standard (2 Weeks)	TURNAROUND TIME	

SAMPLE DISPOSAL  Z Dispose after 30 days  C Return samples  Will call with instructions
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FORBIRS VOICE VOICE DOC	Flux (306) 202-6044	-	Secretary WA 98119-2029	1-1			Er. (2-502	F<- (E-58)	FC-CE-WSWI	F(. CE-55W)	FC-CE-ESWI	FC-CE-NSWI	Sample ID	3	
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#### **ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D. Charlene Morrow, M.S. Yelena Aravkina, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

August 12, 2010

Miguel Ortega, Project Manager EHS International 13228 NE 20<sup>th</sup> St, Ste 100 Bellevue, WA 98005

Dear Mr. Ortega:

Included are the results from the testing of material submitted on August 3, 2010 from the Federal Center South 10048-04, F&BI 008022 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA. INC.

Michael Erdahl Project Manager

Enclosures NAA0812R.DOC

## FRIEDMAN & BRUYA, INC. ENVIRONMENTAL CHEMISTS

#### **CASE NARRATIVE**

This case narrative encompasses samples received on August 3, 2010 by Friedman & Bruya, Inc. from the EHS International Federal Center South 10048-04, F&BI 008022 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	EHS International
008022-01	FC-SE-NSW1
008022-02	FC-SE-SSW1
008022-03	FC-SE-ESW1
008022-04	FC-SE-WSW1
008022-05	FC-TP1-5
008022-06	FC-TP2-5
008022-07	FC-SP-3

All quality control requirements were acceptable.

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 08/12/10 Date Received: 08/03/10

Project: Federal Center South 10048-04, F&BI 008022

Date Extracted: 08/04/10 Date Analyzed: 08/04/10

#### RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Results Reported on a Dry Weight Basis Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	Ethyl <u>Benzene</u>	Total <u>Xylenes</u>	Gasoline <u>Range</u>	Surrogate (% Recovery) (Limit 50-150)
FC-TP1-5 008022-05	< 0.02	<0.02	< 0.02	< 0.06	<2	62
FC-TP2-5 008022-06	< 0.02	<0.02	< 0.02	< 0.06	3.9	56
Method Blank 00-1129 MB2	<0.02	< 0.02	< 0.02	< 0.06	<2	55

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 08/12/10 Date Received: 08/03/10

Project: Federal Center South 10048-04, F&BI 008022

Date Extracted: 08/04/10 Date Analyzed: 08/04/10

# RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx Sample Extracts Passed Through a Silica Gel Column Prior to Analysis

Results Reported on a Dry Weight Basis Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C <sub>10</sub> -C <sub>25</sub> )	Motor Oil Range (C <sub>25</sub> -C <sub>36</sub> )	Surrogate (% Recovery) (Limit 50-150)
FC-SE-NSW1 008022-01	< 50	<250	73
FC-SE-SSW1 008022-02	<50	<250	67
FC-SE-ESW1 008022-03	<50	<250	71
FC-SE-WSW1 008022-04	< 50	<250	63
FC-TP1-5 008022-05	< 50	<250	85
FC-TP2-5 008022-06	< 50	<250	60
FC-SP-3 008022-07	<50	<250	61
Method Blank <sub>00-1163 MB</sub>	<50	<250	70

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 08/12/10 Date Received: 08/03/10

Project: Federal Center South 10048-04, F&BI 008022

# QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Laboratory Code: 008008-01 (Duplicate)

· ·	•	(Wet Wt)	(Wet Wt)	Relative Percent
	Reporting	Sample	Duplicate	Difference
Analyte	Units	Result	Result	(Limit 20)
Benzene	mg/kg (ppm)	< 0.02	< 0.02	nm
Toluene	mg/kg (ppm)	< 0.02	< 0.02	nm
Ethylbenzene	mg/kg (ppm)	< 0.02	< 0.02	nm
Xylenes	mg/kg (ppm)	< 0.06	< 0.06	nm
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Benzene	mg/kg (ppm)	0.5	102	66-121
Toluene	mg/kg (ppm)	0.5	105	72-128
Ethylbenzene	mg/kg (ppm)	0.5	103	69-132
Xylenes	mg/kg (ppm)	1.5	108	69-131
Gasoline	mg/kg (ppm)	20	80	61-153

## FRIEDMAN & BRUYA, INC. ENVIRONMENTAL CHEMISTS

Date of Report: 08/12/10 Date Received: 08/03/10

Project: Federal Center South 10048-04, F&BI 008022

#### QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 008022-03 (Matrix Spike) Silica Gel

			(Wet wt)	Percent	Percent		
	Reporting	Spike	Sample	Recovery	Recovery	Acceptance	RPD
Analyte	Ünits	Level	Result	MS	MSD	Criteria	(Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	< 50	90	84	73-135	7

Laboratory Code: Laboratory Control Sample Silica Gel

			1 er cent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Diesel Extended	mg/kg (ppm)	5,000	87	74-139

#### **ENVIRONMENTAL CHEMISTS**

#### **Data Qualifiers & Definitions**

- a The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- A1 More than one compound of similar molecule structure was identified with equal probability.
- b The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.
- c The presence of the analyte indicated may be due to carryover from previous sample injections.
- d The sample was diluted. Detection limits may be raised due to dilution.
- ds The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.
- dv Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.
- fb Analyte present in the blank and the sample.
- fc The compound is a common laboratory and field contaminant.
- hr The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.
- ht Analysis performed outside the method or client-specified holding time requirement.
- ip Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.
- j The result is below normal reporting limits. The value reported is an estimate.
- J The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- ${
  m jl}$  The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.
- jr The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- js The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- lc The presence of the compound indicated is likely due to laboratory contamination.
- L The reported concentration was generated from a library search.
- nm The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc The sample was received in a container not approved by the method. The value reported should be considered an estimate.
- pr The sample was received with incorrect preservation. The value reported should be considered an estimate.
- $ve-Estimated\ concentration\ calculated\ for\ an\ analyte\ response\ above\ the\ valid\ instrument\ calibration\ range.\ A\ dilution\ is\ required\ to\ obtain\ an\ accurate\ quantification\ of\ the\ analyte.$
- vo The value reported fell outside the control limits established for this analyte.
- x The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

008022 @eksintlican

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Samples received at 20 °C

#### **ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D. Charlene Morrow, M.S. Yelena Aravkina, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

August 26, 2010

Miguel Ortega, Project Manager EHS International 13228 NE 20<sup>th</sup> St, Ste 100 Bellevue, WA 98005

Dear Mr. Ortega:

Included are the results from the testing of material submitted on August 19, 2010 from the Federal Center South 10048-11, F&BI 008212 project. There are 45 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures c: Diana Phelan EHS0826R.DOC

## FRIEDMAN & BRUYA, INC. ENVIRONMENTAL CHEMISTS

#### CASE NARRATIVE

This case narrative encompasses samples received on August 19, 2010 by Friedman & Bruya, Inc. from the EHS International Federal Center South 10048-11, F&BI 008212 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	EHS International
008212-01	FCS-SW-SSW
008212-02	FCS-SW-W
008212-03	FCS-SW-NNW
008212-04	FCS-SW-WNW
008212-05	FCS-SW-NMID
008212-06	FCS-SW-SMID
008212-07	FCS-SW-SE
008212-08	FCS-SW-E
008212-09	FCS-SW-NE

The NWTPH-Gx surrogate for sample FCS-SW-SSW exceeded the acceptance criteria. Gasoline was not detected in the sample, therefore the data were acceptable.

The trichlorofluoromethane 8260C calibration standard did not pass the acceptance criteria. The data were flagged accordingly.

Several 8260C compounds failed below the acceptance criteria in the matrix spike samples. The laboratory control samples met the acceptance criteria, therefore the data were likely due to sample matrix effect.

Several compounds in the 8260C laboratory control sample duplicate exceeded the acceptance criteria. The analytes were not detected in the sample, therefore the data were acceptable.

All other quality control requirements were acceptable.

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 08/26/10 Date Received: 08/19/10

Project: Federal Center South 10048-11, F&BI 008212

Date Extracted: 08/19/10 and 08/23/10

Date Analyzed: 08/19/10, 08/20/10, and 08/24/10

## RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE USING METHOD NWTPH-Gx

Results Reported on a Dry Weight Basis Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 58-139)
FCS-SW-SSW 008212-01	<2	164 vo
FCS-SW-W 008212-02	<2	99
FCS-SW-NNW 008212-03	<2	112
FCS-SW-WNW 008212-04	<2	104
FCS-SW-NMID 008212-05	<2	110
FCS-SW-SMID 008212-06	<2	106
FCS-SW-SE 008212-07	<2	102
FCS-SW-E	<2	99
FCS-SW-NE	<2	92
Method Blank 00-1272 MB	<2	94
Method Blank <sub>00-1305 MB</sub>	<2	105

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 08/26/10 Date Received: 08/19/10

Project: Federal Center South 10048-11, F&BI 008212

Date Extracted: 08/19/10 Date Analyzed: 08/19/10

## RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C <sub>10</sub> -C <sub>25</sub> )	Motor Oil Range (C <sub>25</sub> -C <sub>36</sub> )	Surrogate (% Recovery) (Limit 53-144)
FCS-SW-SSW 008212-01	< 50	<250	102
FCS-SW-W 008212-02	< 50	<250	103
FCS-SW-NNW 008212-03	< 50	<250	104
FCS-SW-WNW 008212-04	< 50	<250	104
FCS-SW-NMID 008212-05	< 50	<250	105
FCS-SW-SMID 008212-06	< 50	<250	105
FCS-SW-SE 008212-07	< 50	<250	105
FCS-SW-E 008212-08	< 50	<250	105
FCS-SW-NE 008212-09	< 50	<250	103
Method Blank 00-1285 MB	<50	<250	105

#### **ENVIRONMENTAL CHEMISTS**

## Analysis For Total Metals By EPA Method 200.8

Client ID: FCS-SW-SSW Client: **EHS** International

Project: Federal Center South 10048-11, F&BI 008212 Date Received: 08/19/10

Lab ID: 08/19/10 008212-01 Date Extracted: Date Analyzed: 08/19/10 Data File: 008212-01.017 Matrix: Instrument: ICPMS1 Soil AP

mg/kg (ppm) Units: Operator:

		Lower	Upper
Internal Standard:	% Recovery:	Limit:	Limit:
Germanium	104	60	125
Indium	103	60	125
Holmium	101	60	125

Concentration mg/kg (ppm)

Chromium 4.65 Arsenic 1.29 Selenium <1 Silver <1 Cadmium <1 Barium 9.11 Lead <1

Analyte:

#### **ENVIRONMENTAL CHEMISTS**

## Analysis For Total Metals By EPA Method 200.8

Client ID: FCS-SW-W Client: EHS International

Date Received: 08/19/10 Project: Federal Center South 10048-11, F&BI 008212

Lab ID: Date Extracted: 08/19/10 008212-02 Date Analyzed: 08/19/10 Data File: 008212-02.019 Matrix: Soil Instrument: ICPMS1 Units: mg/kg (ppm) Operator: AP

Upper Lower Limit: **Internal Standard:** % Recovery: Limit: Germanium 97 60 125 98 Indium 60 125 Holmium 96 60 125

Analyte: Concentration mg/kg (ppm)

 Chromium
 4.47

 Arsenic
 <1</td>

 Selenium
 <1</td>

 Silver
 <1</td>

 Cadmium
 <1</td>

 Barium
 8.14

 Lead
 <1</td>

#### **ENVIRONMENTAL CHEMISTS**

## Analysis For Total Metals By EPA Method 200.8

Client ID: FCS-SW-NNW Client: EHS International

Date Received: 08/19/10 Project: Federal Center South 10048-11, F&BI 008212

Lab ID: Date Extracted: 08/19/10 008212-03 Date Analyzed: 08/19/10 Data File: 008212-03.020 Matrix: Soil Instrument: ICPMS1 Units: mg/kg (ppm) Operator: AP

Upper Lower Limit: **Internal Standard:** % Recovery: Limit: Germanium 102 60 125 102 Indium 60 125 Holmium 100 60 125

Concentration mg/kg (ppm)

Analyte: mg/kg (ppm)

Chromium 4.95
Arsenic 1.45
Selenium <1
Silver <1
Cadmium <1
Barium 9.43
Lead 1.97

#### **ENVIRONMENTAL CHEMISTS**

## Analysis For Total Metals By EPA Method 200.8

Client ID: FCS-SW-WNW Client: EHS International

Date Received: 08/19/10 Project: Federal Center South 10048-11, F&BI 008212

Lab ID: Date Extracted: 08/19/10 008212-04 Date Analyzed: 08/19/10 Data File: 008212-04.021 Matrix: Soil Instrument: ICPMS1 Units: mg/kg (ppm) Operator: AP

Upper Lower Limit: **Internal Standard:** % Recovery: Limit: Germanium 103 60 125 100 Indium 60 125 Holmium 102 60 125

> Concentration mg/kg (ppm)

 Chromium
 5.50

 Arsenic
 <1</td>

 Selenium
 <1</td>

 Silver
 <1</td>

 Cadmium
 <1</td>

 Barium
 8.05

 Lead
 <1</td>

Analyte:

#### **ENVIRONMENTAL CHEMISTS**

## Analysis For Total Metals By EPA Method 200.8

Client ID: FCS-SW-NMID Client: EHS International

Date Received: 08/19/10 Project: Federal Center South 10048-11, F&BI 008212

Lab ID: Date Extracted: 08/19/10 008212-05 Date Analyzed: 08/19/10 Data File: 008212-05.022 Matrix: Soil Instrument: ICPMS1 Units: mg/kg (ppm) Operator: AP

Lower Upper Limit: **Internal Standard:** % Recovery: Limit: Germanium 100 60 125 Indium 105 60 125 Holmium 99 60 125

Analyte: Concentration mg/kg (ppm)

 Chromium
 5.05

 Arsenic
 2.05

 Selenium
 <1</td>

 Silver
 <1</td>

 Cadmium
 <1</td>

 Barium
 9.39

 Lead
 1.02

#### **ENVIRONMENTAL CHEMISTS**

## Analysis For Total Metals By EPA Method 200.8

Client ID: FCS-SW-SMID Client: EHS International

Date Received: 08/19/10 Project: Federal Center South 10048-11, F&BI 008212

Lab ID: Date Extracted: 08/19/10 008212-06 Date Analyzed: 08/19/10 Data File: 008212-06.023 Matrix: Soil Instrument: ICPMS1 Units: mg/kg (ppm) Operator: AP

Lower Upper Limit: **Internal Standard:** % Recovery: Limit: Germanium 103 60 125 101 Indium 60 125 Holmium 104 60 125

Analyte: Concentration mg/kg (ppm)

 Chromium
 5.68

 Arsenic
 1.79

 Selenium
 <1</td>

 Silver
 <1</td>

 Cadmium
 <1</td>

 Barium
 10.1

 Lead
 1.70

#### **ENVIRONMENTAL CHEMISTS**

## Analysis For Total Metals By EPA Method 200.8

Client ID: FCS-SW-SE Client: **EHS** International

Project: Date Received: 08/19/10 Federal Center South 10048-11, F&BI 008212

Lab ID: 08/19/10 008212-07 Date Extracted: Date Analyzed: 08/19/10 Data File: 008212-07.024 Matrix: Instrument: ICPMS1 Soil AP

mg/kg (ppm) Units: Operator:

		Lower	Upper
Internal Standard:	% Recovery:	Limit:	Limit:
Germanium	100	60	125
Indium	102	60	125
Holmium	97	60	125

Concentration

Analyte: mg/kg (ppm) Chromium 6.04

Arsenic 11.6 Selenium <1 Silver <1 Cadmium <1 Barium 10.4 Lead 1.19

#### **ENVIRONMENTAL CHEMISTS**

## Analysis For Total Metals By EPA Method 200.8

Client ID: FCS-SW-E Client: EHS International

Date Received: 08/19/10 Project: Federal Center South 10048-11, F&BI 008212

Lab ID: Date Extracted: 08/19/10 008212-08 Date Analyzed: 08/19/10 Data File: 008212-08.025 Matrix: Soil Instrument: ICPMS1 Units: mg/kg (ppm) Operator: AP

Lower Upper Limit: **Internal Standard:** % Recovery: Limit: Germanium 100 60 125 98 Indium 60 125 Holmium 102 60 125

Analyte: Concentration mg/kg (ppm)

Chromium 5.75

 Arsenic
 1.01

 Selenium
 <1</td>

 Silver
 <1</td>

 Cadmium
 <1</td>

 Barium
 8.31

 Lead
 1.16

#### **ENVIRONMENTAL CHEMISTS**

## Analysis For Total Metals By EPA Method 200.8

Client ID: FCS-SW-NE Client: EHS International

Date Received: 08/19/10 Project: Federal Center South 10048-11, F&BI 008212

Lab ID: Date Extracted: 08/19/10 008212-09 Date Analyzed: 08/19/10 Data File: 008212-09.026 Matrix: Soil Instrument: ICPMS1 Units: mg/kg (ppm) Operator: AP

Upper Lower Limit: **Internal Standard:** % Recovery: Limit: Germanium 100 60 125 99 Indium 60 125 Holmium 99 60 125

Analyte: Concentration mg/kg (ppm)

Chromium4.78Arsenic3.73Selenium<1</td>Silver<1</td>Cadmium<1</td>Barium10.7Lead176

#### **ENVIRONMENTAL CHEMISTS**

## Analysis For Total Metals By EPA Method 200.8

Client ID: Method Blank Client: **EHS** International

Project: Date Received: Federal Center South 10048-11, F&BI 008212 NA

Lab ID: 08/19/10 I0-450 mb Date Extracted: Date Analyzed: 08/19/10 Data File: I0-450 mb.012 Matrix: Soil Instrument: ICPMS1 AP

mg/kg (ppm) Units: Operator:

		Lower	Upper
Internal Standard:	% Recovery:	Limit:	Limit:
Germanium	96	60	125
Indium	95	60	125
Holmium	94	60	125

Concentration mg/kg (ppm)

Chromium <1 Arsenic <1 Selenium <1 Silver <1 Cadmium <1 Barium <1 Lead <1

Analyte:

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 08/26/10 Date Received: 08/19/10

Project: Federal Center South 10048-11, F&BI 008212

Date Extracted: 08/19/10 Date Analyzed: 08/20/10

## RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLES FOR TOTAL MERCURY USING EPA METHOD 1631E

Results Reported on a Dry Weight Basis Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	<u>Total Mercury</u>
FCS-SW-SSW 008212-01	< 0.2
FCS-SW-W 008212-02	< 0.2
FCS-SW-NNW 008212-03	<0.2
FCS-SW-WNW 008212-04	<0.2
FCS-SW-NMID 008212-05	<0.2
FCS-SW-SMID 008212-06	<0.2
FCS-SW-SE 008212-07	<0.2
FCS-SW-E 008212-08	<0.2
FCS-SW-NE 008212-09	<0.2
Method Blank	<0.2

#### **ENVIRONMENTAL CHEMISTS**

## Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: FCS-SW-SSW Client: EHS International

Date Received: 08/19/10 Project: Federal Center South 10048-11, F&BI 008212

Date Extracted:08/19/10Lab ID:008212-01Date Analyzed:08/19/10Data File:081913.DMatrix:SoilInstrument:GCMS5Units:mg/kg (ppm)Operator:bb

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	116	42	152
Toluene-d8	117	36	149
4-Bromofluorobenzene	117	50	150

	Concentration		Concentration
Compounds:	mg/kg (ppm)	Compounds:	mg/kg (ppm)
Dichlorodifluoromethane	< 0.5	1,3-Dichloropropane	< 0.05
Chloromethane	< 0.5	Tetrachloroethene	< 0.025
Vinyl chloride	< 0.05	Dibromochloromethane	< 0.05
Bromomethane	< 0.5	1,2-Dibromoethane (EDB)	< 0.05
Chloroethane	< 0.5	Chlorobenzene	< 0.05
Trichlorofluoromethane	<0.5 ca	Ethylbenzene	< 0.05
Acetone	< 0.5	1,1,1,2-Tetrachloroethane	< 0.05
1,1-Dichloroethene	< 0.05	m,p-Xylene	< 0.1
Methylene chloride	< 0.5	o-Xylene	< 0.05
Methyl t-butyl ether (MTBE)	< 0.05	Styrene	< 0.05
trans-1,2-Dichloroethene	< 0.05	Isopropylbenzene	< 0.05
1,1-Dichloroethane	< 0.05	Bromoform	< 0.05
2,2-Dichloropropane	< 0.05	n-Propylbenzene	< 0.05
cis-1,2-Dichloroethene	< 0.05	Bromobenzene	< 0.05
Chloroform	< 0.05	1,3,5-Trimethylbenzene	< 0.05
2-Butanone (MEK)	< 0.5	1,1,2,2-Tetrachloroethane	< 0.05
1,2-Dichloroethane (EDC)	< 0.05	1,2,3-Trichloropropane	< 0.05
1,1,1-Trichloroethane	< 0.05	2-Chlorotoluene	< 0.05
1,1-Dichloropropene	< 0.05	4-Chlorotoluene	< 0.05
Carbon tetrachloride	< 0.05	tert-Butylbenzene	< 0.05
Benzene	< 0.03	1,2,4-Trimethylbenzene	< 0.05
Trichloroethene	< 0.03	sec-Butylbenzene	< 0.05
1,2-Dichloropropane	< 0.05	p-Isopropyltoluene	< 0.05
Bromodichloromethane	< 0.05	1,3-Dichlorobenzene	< 0.05
Dibromomethane	< 0.05	1,4-Dichlorobenzene	< 0.05
4-Methyl-2-pentanone	< 0.5	1,2-Dichlorobenzene	< 0.05
cis-1,3-Dichloropropene	< 0.05	1,2-Dibromo-3-chloropropane	< 0.5
Toluene	< 0.05	1,2,4-Trichlorobenzene	< 0.25
trans-1,3-Dichloropropene	< 0.05	Hexachlorobutadiene	< 0.25
1,1,2-Trichloroethane	< 0.05	Naphthalene	< 0.1
2-Hexanone	< 0.5	1,2,3-Trichlorobenzene	< 0.25

#### **ENVIRONMENTAL CHEMISTS**

## Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: FCS-SW-W Client: EHS International

Date Received: 08/19/10 Project: Federal Center South 10048-11, F&BI 008212

Date Extracted:08/19/10Lab ID:008212-02Date Analyzed:08/19/10Data File:081914.DMatrix:SoilInstrument:GCMS5Units:mg/kg (ppm)Operator:bb

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	123	42	152
Toluene-d8	123	36	149
4-Bromofluorobenzene	123	50	150

	Concentration		Concentration
Compounds:	mg/kg (ppm)	Compounds:	mg/kg (ppm)
Dichlorodifluoromethane	< 0.5	1,3-Dichloropropane	< 0.05
Chloromethane	< 0.5	Tetrachloroethene	< 0.025
Vinyl chloride	< 0.05	Dibromochloromethane	< 0.05
Bromomethane	< 0.5	1,2-Dibromoethane (EDB)	< 0.05
Chloroethane	< 0.5	Chlorobenzene	< 0.05
Trichlorofluoromethane	<0.5 ca	Ethylbenzene	< 0.05
Acetone	< 0.5	1,1,1,2-Tetrachloroethane	< 0.05
1,1-Dichloroethene	< 0.05	m,p-Xylene	< 0.1
Methylene chloride	< 0.5	o-Xylene	< 0.05
Methyl t-butyl ether (MTBE)	< 0.05	Styrene	< 0.05
trans-1,2-Dichloroethene	< 0.05	Isopropylbenzene	< 0.05
1,1-Dichloroethane	< 0.05	Bromoform	< 0.05
2,2-Dichloropropane	< 0.05	n-Propylbenzene	< 0.05
cis-1,2-Dichloroethene	< 0.05	Bromobenzene	< 0.05
Chloroform	< 0.05	1,3,5-Trimethylbenzene	< 0.05
2-Butanone (MEK)	< 0.5	1,1,2,2-Tetrachloroethane	< 0.05
1,2-Dichloroethane (EDC)	< 0.05	1,2,3-Trichloropropane	< 0.05
1,1,1-Trichloroethane	< 0.05	2-Chlorotoluene	< 0.05
1,1-Dichloropropene	< 0.05	4-Chlorotoluene	< 0.05
Carbon tetrachloride	< 0.05	tert-Butylbenzene	< 0.05
Benzene	< 0.03	1,2,4-Trimethylbenzene	< 0.05
Trichloroethene	< 0.03	sec-Butylbenzene	< 0.05
1,2-Dichloropropane	< 0.05	p-Isopropyltoluene	< 0.05
Bromodichloromethane	< 0.05	1,3-Dichlorobenzene	< 0.05
Dibromomethane	< 0.05	1,4-Dichlorobenzene	< 0.05
4-Methyl-2-pentanone	< 0.5	1,2-Dichlorobenzene	< 0.05
cis-1,3-Dichloropropene	< 0.05	1,2-Dibromo-3-chloropropane	< 0.5
Toluene	< 0.05	1,2,4-Trichlorobenzene	< 0.25
trans-1,3-Dichloropropene	< 0.05	Hexachlorobutadiene	< 0.25
1,1,2-Trichloroethane	< 0.05	Naphthalene	< 0.1
2-Hexanone	< 0.5	1,2,3-Trichlorobenzene	< 0.25

#### **ENVIRONMENTAL CHEMISTS**

## Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: FCS-SW-NNW Client: EHS International

Date Received: 08/19/10 Project: Federal Center South 10048-11, F&BI 008212

Date Extracted:08/19/10Lab ID:008212-03Date Analyzed:08/19/10Data File:081915.DMatrix:SoilInstrument:GCMS5Units:mg/kg (ppm)Operator:bb

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	118	42	152
Toluene-d8	123	36	149
4-Bromofluorobenzene	122	50	150

	Concentration		Concentration
Compounds:	mg/kg (ppm)	Compounds:	mg/kg (ppm)
Dichlorodifluoromethane	< 0.5	1,3-Dichloropropane	< 0.05
Chloromethane	< 0.5	Tetrachloroethene	< 0.025
Vinyl chloride	< 0.05	Dibromochloromethane	< 0.05
Bromomethane	< 0.5	1,2-Dibromoethane (EDB)	< 0.05
Chloroethane	< 0.5	Chlorobenzene	< 0.05
Trichlorofluoromethane	<0.5 ca	Ethylbenzene	< 0.05
Acetone	< 0.5	1,1,1,2-Tetrachloroethane	< 0.05
1,1-Dichloroethene	< 0.05	m,p-Xylene	< 0.1
Methylene chloride	< 0.5	o-Xylene	< 0.05
Methyl t-butyl ether (MTBE)	< 0.05	Styrene	< 0.05
trans-1,2-Dichloroethene	< 0.05	Isopropylbenzene	< 0.05
1,1-Dichloroethane	< 0.05	Bromoform	< 0.05
2,2-Dichloropropane	< 0.05	n-Propylbenzene	< 0.05
cis-1,2-Dichloroethene	< 0.05	Bromobenzene	< 0.05
Chloroform	< 0.05	1,3,5-Trimethylbenzene	< 0.05
2-Butanone (MEK)	< 0.5	1,1,2,2-Tetrachloroethane	< 0.05
1,2-Dichloroethane (EDC)	< 0.05	1,2,3-Trichloropropane	< 0.05
1,1,1-Trichloroethane	< 0.05	2-Chlorotoluene	< 0.05
1,1-Dichloropropene	< 0.05	4-Chlorotoluene	< 0.05
Carbon tetrachloride	< 0.05	tert-Butylbenzene	< 0.05
Benzene	< 0.03	1,2,4-Trimethylbenzene	< 0.05
Trichloroethene	< 0.03	sec-Butylbenzene	< 0.05
1,2-Dichloropropane	< 0.05	p-Isopropyltoluene	< 0.05
Bromodichloromethane	< 0.05	1,3-Dichlorobenzene	< 0.05
Dibromomethane	< 0.05	1,4-Dichlorobenzene	< 0.05
4-Methyl-2-pentanone	< 0.5	1,2-Dichlorobenzene	< 0.05
cis-1,3-Dichloropropene	< 0.05	1,2-Dibromo-3-chloropropane	< 0.5
Toluene	< 0.05	1,2,4-Trichlorobenzene	< 0.25
trans-1,3-Dichloropropene	< 0.05	Hexachlorobutadiene	< 0.25
1,1,2-Trichloroethane	< 0.05	Naphthalene	< 0.1
2-Hexanone	< 0.5	1,2,3-Trichlorobenzene	< 0.25

#### **ENVIRONMENTAL CHEMISTS**

## Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: FCS-SW-WNW Client: EHS International

Date Received: 08/19/10 Project: Federal Center South 10048-11, F&BI 008212

Date Extracted:08/19/10Lab ID:008212-04Date Analyzed:08/19/10Data File:081916.DMatrix:SoilInstrument:GCMS5Units:mg/kg (ppm)Operator:bb

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	124	42	152
Toluene-d8	122	36	149
4-Bromofluorobenzene	122	50	150

	Concentration		Concentration
Compounds:	mg/kg (ppm)	Compounds:	mg/kg (ppm)
Dichlorodifluoromethane	< 0.5	1,3-Dichloropropane	< 0.05
Chloromethane	< 0.5	Tetrachloroethene	< 0.025
Vinyl chloride	< 0.05	Dibromochloromethane	< 0.05
Bromomethane	< 0.5	1,2-Dibromoethane (EDB)	< 0.05
Chloroethane	< 0.5	Chlorobenzene	< 0.05
Trichlorofluoromethane	<0.5 ca	Ethylbenzene	< 0.05
Acetone	< 0.5	1,1,1,2-Tetrachloroethane	< 0.05
1,1-Dichloroethene	< 0.05	m,p-Xylene	< 0.1
Methylene chloride	< 0.5	o-Xylene	< 0.05
Methyl t-butyl ether (MTBE)	< 0.05	Styrene	< 0.05
trans-1,2-Dichloroethene	< 0.05	Isopropylbenzene	< 0.05
1,1-Dichloroethane	< 0.05	Bromoform	< 0.05
2,2-Dichloropropane	< 0.05	n-Propylbenze ne	< 0.05
cis-1,2-Dichloroethene	< 0.05	Bromobenzene	< 0.05
Chloroform	< 0.05	1,3,5-Trimethylbenzene	< 0.05
2-Butanone (MEK)	< 0.5	1,1,2,2-Tetrachloroethane	< 0.05
1,2-Dichloroethane (EDC)	< 0.05	1,2,3-Trichloropropane	< 0.05
1,1,1-Trichloroethane	< 0.05	2-Chlorotoluene	< 0.05
1,1-Dichloropropene	< 0.05	4-Chlorotoluene	< 0.05
Carbon tetrachloride	< 0.05	tert-Butylbenzene	< 0.05
Benzene	< 0.03	1,2,4-Trimethylbenzene	< 0.05
Trichloroethene	< 0.03	sec-Butylbenzene	< 0.05
1,2-Dichloropropane	< 0.05	p-Isopropyltoluene	< 0.05
Bromodichloromethane	< 0.05	1,3-Dichlorobenzene	< 0.05
Dibromomethane	< 0.05	1,4-Dichlorobenzene	< 0.05
4-Methyl-2-pentanone	< 0.5	1,2-Dichlorobenzene	< 0.05
cis-1,3-Dichloropropene	< 0.05	1,2-Dibromo-3-chloropropane	< 0.5
Toluene	< 0.05	1,2,4-Trichlorobenzene	< 0.25
trans-1,3-Dichloropropene	< 0.05	Hexachlorobutadiene	< 0.25
1,1,2-Trichloroethane	< 0.05	Naphthalene	< 0.1
2-Hexanone	< 0.5	1,2,3-Trichlorobenzene	< 0.25

#### **ENVIRONMENTAL CHEMISTS**

## Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: FCS-SW-NMID Client: EHS International

Date Received: 08/19/10 Project: Federal Center South 10048-11, F&BI 008212

Date Extracted:08/19/10Lab ID:008212-05Date Analyzed:08/19/10Data File:081917.DMatrix:SoilInstrument:GCMS5Units:mg/kg (ppm)Operator:bb

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	124	42	152
Toluene-d8	125	36	149
4-Bromofluorobenzene	123	50	150

	Concentration		Concentration
Compounds:	mg/kg (ppm)	Compounds:	mg/kg (ppm)
Dichlorodifluoromethane	< 0.5	1,3-Dichloropropane	< 0.05
Chloromethane	< 0.5	Tetrachloroethene	< 0.025
Vinyl chloride	< 0.05	Dibromochloromethane	< 0.05
Bromomethane	< 0.5	1,2-Dibromoethane (EDB)	< 0.05
Chloroethane	< 0.5	Chlorobenzene	< 0.05
Trichlorofluoromethane	<0.5 ca	Ethylbenzene	< 0.05
Acetone	< 0.5	1,1,1,2-Tetrachloroethane	< 0.05
1,1-Dichloroethene	< 0.05	m,p-Xylene	< 0.1
Methylene chloride	< 0.5	o-Xylene	< 0.05
Methyl t-butyl ether (MTBE)	< 0.05	Styrene	< 0.05
trans-1,2-Dichloroethene	< 0.05	Isopropylbenzene	< 0.05
1,1-Dichloroethane	< 0.05	Bromoform	< 0.05
2,2-Dichloropropane	< 0.05	n-Propylbenzene	< 0.05
cis-1,2-Dichloroethene	< 0.05	Bromobenzene	< 0.05
Chloroform	< 0.05	1,3,5-Trimethylbenzene	< 0.05
2-Butanone (MEK)	< 0.5	1,1,2,2-Tetrachloroethane	< 0.05
1,2-Dichloroethane (EDC)	< 0.05	1,2,3-Trichloropropane	< 0.05
1,1,1-Trichloroethane	< 0.05	2-Chlorotoluene	< 0.05
1,1-Dichloropropene	< 0.05	4-Chlorotoluene	< 0.05
Carbon tetrachloride	< 0.05	tert-Butylbenzene	< 0.05
Benzene	< 0.03	1,2,4-Trimethylbenzene	< 0.05
Trichloroethene	< 0.03	sec-Butylbenzene	< 0.05
1,2-Dichloropropane	< 0.05	p-Isopropyltoluene	< 0.05
Bromodichloromethane	< 0.05	1,3-Dichlorobenzene	< 0.05
Dibromomethane	< 0.05	1,4-Dichlorobenzene	< 0.05
4-Methyl-2-pentanone	< 0.5	1,2-Dichlorobenzene	< 0.05
cis-1,3-Dichloropropene	< 0.05	1,2-Dibromo-3-chloropropane	< 0.5
Toluene	< 0.05	1,2,4-Trichlorobenzene	< 0.25
trans-1,3-Dichloropropene	< 0.05	Hexachlorobutadiene	< 0.25
1,1,2-Trichloroethane	< 0.05	Naphthalene	< 0.1
2-Hexanone	< 0.5	1,2,3-Trichlorobenzene	< 0.25

#### **ENVIRONMENTAL CHEMISTS**

## Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: FCS-SW-SMID Client: EHS International

Date Received: 08/19/10 Project: Federal Center South 10048-11, F&BI 008212

Date Extracted:08/19/10Lab ID:008212-06Date Analyzed:08/19/10Data File:081918.DMatrix:SoilInstrument:GCMS5Units:mg/kg (ppm)Operator:bb

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	123	42	152
Toluene-d8	123	36	149
4-Bromofluorobenzene	121	50	150

	Concentration		Concentration
Compounds:	mg/kg (ppm)	Compounds:	mg/kg (ppm)
Dichlorodifluoromethane	< 0.5	1,3-Dichloropropane	< 0.05
Chloromethane	< 0.5	Tetrachloroethene	< 0.025
Vinyl chloride	< 0.05	Dibromochloromethane	< 0.05
Bromomethane	< 0.5	1,2-Dibromoethane (EDB)	< 0.05
Chloroethane	< 0.5	Chlorobenzene	< 0.05
Trichlorofluoromethane	<0.5 ca	Ethylbenzene	< 0.05
Acetone	< 0.5	1,1,1,2-Tetrachloroethane	< 0.05
1,1-Dichloroethene	< 0.05	m,p-Xylene	< 0.1
Methylene chloride	< 0.5	o-Xylene	< 0.05
Methyl t-butyl ether (MTBE)	< 0.05	Styrene	< 0.05
trans-1,2-Dichloroethene	< 0.05	Isopropylbenzene	< 0.05
1,1-Dichloroethane	< 0.05	Bromoform	< 0.05
2,2-Dichloropropane	< 0.05	n-Propylbenzene	< 0.05
cis-1,2-Dichloroethene	< 0.05	Bromobenzene	< 0.05
Chloroform	< 0.05	1,3,5-Trimethylbenzene	< 0.05
2-Butanone (MEK)	< 0.5	1,1,2,2-Tetrachloroethane	< 0.05
1,2-Dichloroethane (EDC)	< 0.05	1,2,3-Trichloropropane	< 0.05
1,1,1-Trichloroethane	< 0.05	2-Chlorotoluene	< 0.05
1,1-Dichloropropene	< 0.05	4-Chlorotoluene	< 0.05
Carbon tetrachloride	< 0.05	tert-Butylbenzene	< 0.05
Benzene	< 0.03	1,2,4-Trimethylbenzene	< 0.05
Trichloroethene	< 0.03	sec-Butylbenzene	< 0.05
1,2-Dichloropropane	< 0.05	p-Isopropyltoluene	< 0.05
Bromodichloromethane	< 0.05	1,3-Dichlorobenzene	< 0.05
Dibromomethane	< 0.05	1,4-Dichlorobenzene	< 0.05
4-Methyl-2-pentanone	< 0.5	1,2-Dichlorobenzene	< 0.05
cis-1,3-Dichloropropene	< 0.05	1,2-Dibromo-3-chloropropane	< 0.5
Toluene	< 0.05	1,2,4-Trichlorobenzene	< 0.25
trans-1,3-Dichloropropene	< 0.05	Hexachlorobutadiene	< 0.25
1,1,2-Trichloroethane	< 0.05	Naphthalene	< 0.1
2-Hexanone	< 0.5	1,2,3-Trichlorobenzene	< 0.25

#### **ENVIRONMENTAL CHEMISTS**

## Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: FCS-SW-SE Client: EHS International

Date Received: 08/19/10 Project: Federal Center South 10048-11, F&BI 008212

Date Extracted:08/19/10Lab ID:008212-07Date Analyzed:08/19/10Data File:081919.DMatrix:SoilInstrument:GCMS5Units:mg/kg (ppm)Operator:bb

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	121	42	152
Toluene-d8	122	36	149
4-Bromofluorobenzene	118	50	150

	Concentration		Concentration
Compounds:	mg/kg (ppm)	Compounds:	mg/kg (ppm)
Dichlorodifluoromethane	< 0.5	1,3-Dichloropropane	< 0.05
Chloromethane	< 0.5	Tetrachloroethene	< 0.025
Vinyl chloride	< 0.05	Dibromochloromethane	< 0.05
Bromomethane	< 0.5	1,2-Dibromoethane (EDB)	< 0.05
Chloroethane	< 0.5	Chlorobenzene	< 0.05
Trichlorofluoromethane	<0.5 ca	Ethylbenzene	< 0.05
Acetone	< 0.5	1,1,1,2-Tetrachloroethane	< 0.05
1,1-Dichloroethene	< 0.05	m,p-Xylene	< 0.1
Methylene chloride	< 0.5	o-Xylene	< 0.05
Methyl t-butyl ether (MTBE)	< 0.05	Styrene	< 0.05
trans-1,2-Dichloroethene	< 0.05	Isopropylbenzene	< 0.05
1,1-Dichloroethane	< 0.05	Bromoform	< 0.05
2,2-Dichloropropane	< 0.05	n-Propylbenzene	< 0.05
cis-1,2-Dichloroethene	< 0.05	Bromobenzene	< 0.05
Chloroform	< 0.05	1,3,5-Trimethylbenzene	< 0.05
2-Butanone (MEK)	< 0.5	1,1,2,2-Tetrachloroethane	< 0.05
1,2-Dichloroethane (EDC)	< 0.05	1,2,3-Trichloropropane	< 0.05
1,1,1-Trichloroethane	< 0.05	2-Chlorotoluene	< 0.05
1,1-Dichloropropene	< 0.05	4-Chlorotoluene	< 0.05
Carbon tetrachloride	< 0.05	tert-Butylbenzene	< 0.05
Benzene	< 0.03	1,2,4-Trimethylbenzene	< 0.05
Trichloroethene	< 0.03	sec-Butylbenzene	< 0.05
1,2-Dichloropropane	< 0.05	p-Isopropyltoluene	< 0.05
Bromodichloromethane	< 0.05	1,3-Dichlorobenzene	< 0.05
Dibromomethane	< 0.05	1,4-Dichlorobenzene	< 0.05
4-Methyl-2-pentanone	< 0.5	1,2-Dichlorobenzene	< 0.05
cis-1,3-Dichloropropene	< 0.05	1,2-Dibromo-3-chloropropane	< 0.5
Toluene	< 0.05	1,2,4-Trichlorobenzene	< 0.25
trans-1,3-Dichloropropene	< 0.05	Hexachlorobutadiene	< 0.25
1,1,2-Trichloroethane	< 0.05	Naphthalene	< 0.1
2-Hexanone	< 0.5	1,2,3-Trichlorobenzene	< 0.25

#### **ENVIRONMENTAL CHEMISTS**

## Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: FCS-SW-E Client: EHS International

Date Received: 08/19/10 Project: Federal Center South 10048-11, F&BI 008212

Date Extracted:08/19/10Lab ID:008212-08Date Analyzed:08/19/10Data File:081920.DMatrix:SoilInstrument:GCMS5Units:mg/kg (ppm)Operator:bb

		Lower	Upper
Surrogates:	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-d4	121	42	152
Toluene-d8	123	36	149
4-Bromofluorobenzene	118	50	150

	Concentration		Concentration
Compounds:	mg/kg (ppm)	Compounds:	mg/kg (ppm)
Dichlorodifluoromethane	< 0.5	1,3-Dichloropropane	< 0.05
Chloromethane	< 0.5	Tetrachloroethene	< 0.025
Vinyl chloride	< 0.05	Dibromochloromethane	< 0.05
Bromomethane	< 0.5	1,2-Dibromoethane (EDB)	< 0.05
Chloroethane	< 0.5	Chlorobenzene	< 0.05
Trichlorofluoromethane	<0.5 ca	Ethylbenzene	< 0.05
Acetone	< 0.5	1,1,1,2-Tetrachloroethane	< 0.05
1,1-Dichloroethene	< 0.05	m,p-Xylene	< 0.1
Methylene chloride	< 0.5	o-Xylene	< 0.05
Methyl t-butyl ether (MTBE)	< 0.05	Styrene	< 0.05
trans-1,2-Dichloroethene	< 0.05	Isopropylbenzene	< 0.05
1,1-Dichloroethane	< 0.05	Bromoform	< 0.05
2,2-Dichloropropane	< 0.05	n-Propylbenzene	< 0.05
cis-1,2-Dichloroethene	< 0.05	Bromobenzene	< 0.05
Chloroform	< 0.05	1,3,5-Trimethylbenzene	< 0.05
2-Butanone (MEK)	< 0.5	1,1,2,2-Tetrachloroethane	< 0.05
1,2-Dichloroethane (EDC)	< 0.05	1,2,3-Trichloropropane	< 0.05
1,1,1-Trichloroethane	< 0.05	2-Chlorotoluene	< 0.05
1,1-Dichloropropene	< 0.05	4-Chlorotoluene	< 0.05
Carbon tetrachloride	< 0.05	tert-Butylbenzene	< 0.05
Benzene	< 0.03	1,2,4-Trimethylbenzene	< 0.05
Trichloroethene	< 0.03	sec-Butylbenzene	< 0.05
1,2-Dichloropropane	< 0.05	p-Isopropyltoluene	< 0.05
Bromodichloromethane	< 0.05	1,3-Dichlorobenzene	< 0.05
Dibromomethane	< 0.05	1,4-Dichlorobenzene	0.59
4-Methyl-2-pentanone	< 0.5	1,2-Dichlorobenzene	< 0.05
cis-1,3-Dichloropropene	< 0.05	1,2-Dibromo-3-chloropropane	< 0.5
Toluene	< 0.05	1,2,4-Trichlorobenzene	< 0.25
trans-1,3-Dichloropropene	< 0.05	Hexachlorobutadiene	< 0.25
1,1,2-Trichloroethane	< 0.05	Naphthalene	< 0.1
2-Hexanone	< 0.5	1,2,3-Trichlorobenzene	< 0.25

#### **ENVIRONMENTAL CHEMISTS**

## Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: FCS-SW-NE Client: EHS International

Date Received: 08/19/10 Project: Federal Center South 10048-11, F&BI 008212

Date Extracted:08/19/10Lab ID:008212-09Date Analyzed:08/19/10Data File:081921.DMatrix:SoilInstrument:GCMS5Units:mg/kg (ppm)Operator:bb

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	123	42	152
Toluene-d8	124	36	149
4-Bromofluorobenzene	120	50	150

	Concentration		Concentration
Compounds:	mg/kg (ppm)	Compounds:	mg/kg (ppm)
Dichlorodifluoromethane	< 0.5	1,3-Dichloropropane	< 0.05
Chloromethane	< 0.5	Tetrachloroethene	< 0.025
Vinyl chloride	< 0.05	Dibromochloromethane	< 0.05
Bromomethane	< 0.5	1,2-Dibromoethane (EDB)	< 0.05
Chloroethane	< 0.5	Chlorobenzene	< 0.05
Trichlorofluoromethane	<0.5 ca	Ethylbenzene	< 0.05
Acetone	< 0.5	1,1,1,2-Tetrachloroethane	< 0.05
1,1-Dichloroethene	< 0.05	m,p-Xylene	< 0.1
Methylene chloride	< 0.5	o-Xylene	< 0.05
Methyl t-butyl ether (MTBE)	< 0.05	Styrene	< 0.05
trans-1,2-Dichloroethene	< 0.05	Isopropylbenzene	< 0.05
1,1-Dichloroethane	< 0.05	Bromoform	< 0.05
2,2-Dichloropropane	< 0.05	n-Propylbenzene	< 0.05
cis-1,2-Dichloroethene	< 0.05	Bromobenzene	< 0.05
Chloroform	< 0.05	1,3,5-Trimethylbenzene	< 0.05
2-Butanone (MEK)	< 0.5	1,1,2,2-Tetrachloroethane	< 0.05
1,2-Dichloroethane (EDC)	< 0.05	1,2,3-Trichloropropane	< 0.05
1,1,1-Trichloroethane	< 0.05	2-Chlorotoluene	< 0.05
1,1-Dichloropropene	< 0.05	4-Chlorotoluene	< 0.05
Carbon tetrachloride	< 0.05	tert-Butylbenzene	< 0.05
Benzene	< 0.03	1,2,4-Trimethylbenzene	< 0.05
Trichloroethene	< 0.03	sec-Butylbenzene	< 0.05
1,2-Dichloropropane	< 0.05	p-Isopropyltoluene	< 0.05
Bromodichloromethane	< 0.05	1,3-Dichlorobenzene	< 0.05
Dibromomethane	< 0.05	1,4-Dichlorobenzene	< 0.05
4-Methyl-2-pentanone	< 0.5	1,2-Dichlorobenzene	< 0.05
cis-1,3-Dichloropropene	< 0.05	1,2-Dibromo-3-chloropropane	< 0.5
Toluene	< 0.05	1,2,4-Trichlorobenzene	< 0.25
trans-1,3-Dichloropropene	< 0.05	Hexachlorobutadiene	< 0.25
1,1,2-Trichloroethane	< 0.05	Naphthalene	< 0.1
2-Hexanone	< 0.5	1,2,3-Trichlorobenzene	< 0.25

#### **ENVIRONMENTAL CHEMISTS**

## Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: Method Blank Client: EHS International

Date Received: Not Applicable Project: Federal Center South 10048-11, F&BI 008212

Date Extracted:08/18/10Lab ID:00-1283 mbDate Analyzed:08/19/10Data File:081840.DMatrix:SoilInstrument:GCMS5Units:mg/kg (ppm)Operator:bb

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	121	42	152
Toluene-d8	125	36	149
4-Bromofluorobenzene	118	50	150

	Concentration		Concentration
Compounds:	mg/kg (ppm)	Compounds:	mg/kg (ppm)
Dichlorodifluoromethane	<0.5 ca	1,3-Dichloropropane	< 0.05
Chloromethane	< 0.5	Tetrachloroethene	< 0.025
Vinyl chloride	< 0.05	Dibromochloromethane	< 0.05
Bromomethane	< 0.5	1,2-Dibromoethane (EDB)	< 0.05
Chloroethane	< 0.5	Chlorobenzene	< 0.05
Trichlorofluoromethane	< 0.5	Ethylbenzene	< 0.05
Acetone	< 0.5	1,1,1,2-Tetrachloroethane	< 0.05
1,1-Dichloroethene	< 0.05	m,p-Xylene	< 0.1
Methylene chloride	< 0.5	o-Xylene	< 0.05
Methyl t-butyl ether (MTBE)	< 0.05	Styrene	< 0.05
trans-1,2-Dichloroethene	< 0.05	Isopropylbenzene	< 0.05
1,1-Dichloroethane	< 0.05	Bromoform	< 0.05
2,2-Dichloropropane	< 0.05	n-Propylbenzene	< 0.05
cis-1,2-Dichloroethene	< 0.05	Bromobenzene	< 0.05
Chloroform	< 0.05	1,3,5-Trimethylbenzene	< 0.05
2-Butanone (MEK)	< 0.5	1,1,2,2-Tetrachloroethane	< 0.05
1,2-Dichloroethane (EDC)	< 0.05	1,2,3-Trichloropropane	< 0.05
1,1,1-Trichloroethane	< 0.05	2-Chlorotoluene	< 0.05
1,1-Dichloropropene	< 0.05	4-Chlorotoluene	< 0.05
Carbon tetrachloride	< 0.05	tert-Butylbenzene	< 0.05
Benzene	< 0.03	1,2,4-Trimethylbenzene	< 0.05
Trichloroethene	< 0.03	sec-Butylbenzene	< 0.05
1,2-Dichloropropane	< 0.05	p-Isopropyltoluene	< 0.05
Bromodichloromethane	< 0.05	1,3-Dichlorobenzene	< 0.05
Dibromomethane	< 0.05	1,4-Dichlorobenzene	< 0.05
4-Methyl-2-pentanone	< 0.5	1,2-Dichlorobenzene	< 0.05
cis-1,3-Dichloropropene	< 0.05	1,2-Dibromo-3-chloropropane	<0.5 ca
Toluene	< 0.05	1,2,4-Trichlorobenzene	< 0.25
trans-1,3-Dichloropropene	< 0.05	Hexachlorobutadiene	< 0.25
1,1,2-Trichloroethane	< 0.05	Naphthalene	<0.1 ca
2-Hexanone	< 0.5	1,2,3-Trichlorobenzene	< 0.25

#### **ENVIRONMENTAL CHEMISTS**

## Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID: FCS-SW-SSW Client: **EHS** International

Date Received: Project: 08/19/10 Federal Center South 10048-11, F&BI 008212

Date Extracted: 08/19/10 Lab ID: 008212-01 1/5 Date Analyzed: 08/19/10 Data File: 081908.D Matrix: Soil Instrument: GCMS6

mg/kg (ppm) Operator: Units: YA

		Lower	Upper
Surrogates:	% Recovery:	Limit:	Limit:
Anthracene-d10	83	50	150
Benzo(a)anthracene-d12	84	35	159

Compounds:	Concentration mg/kg (ppm)
Naphthalene	< 0.01
Acenaphthylene	< 0.01
Acenaphthene	< 0.01
Fluorene	< 0.01
Phenanthrene	< 0.01
Anthracene	< 0.01
Fluoranthene	< 0.01
Pyrene	< 0.01
Benz(a)anthracene	< 0.01
Chrysene	< 0.01
Benzo(a)pyrene	< 0.01
Benzo(b)fluoranthene	< 0.01
Benzo(k)fluoranthene	< 0.01
Indeno(1,2,3-cd)pyrene	< 0.01
Dibenz(a,h)anthracene	< 0.01
Benzo(g,h,i)perylene	< 0.01
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#### **ENVIRONMENTAL CHEMISTS**

#### Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID: FCS-SW-W Client: EHS International

Date Received: 08/19/10 Project: Federal Center South 10048-11, F&BI 008212

Lab ID: Date Extracted: 08/19/10 008212-02 1/5 Date Analyzed: 08/19/10 Data File: 081911.D Matrix: Soil Instrument: GCMS6 Units: mg/kg (ppm) Operator: YA

Lower Upper Surrogates: % Recovery: Limit: Limit: Anthracene-d10 90 50 150 Benzo(a)anthracene-d12 93 35 159

Concentration Compounds: mg/kg (ppm) Naphthalene < 0.01 Acenaphthylene < 0.01 Acenaphthene < 0.01 Fluorene < 0.01 Phenanthrene < 0.01 Anthracene < 0.01 Fluoranthene < 0.01 Pyrene < 0.01 Benz(a)anthracene < 0.01 Chrysene < 0.01 Benzo(a)pyrene < 0.01 Benzo(b)fluoranthene < 0.01 Benzo(k)fluoranthene < 0.01 Indeno(1,2,3-cd)pyrene < 0.01 Dibenz(a,h)anthracene < 0.01 Benzo(g,h,i)perylene < 0.01

#### **ENVIRONMENTAL CHEMISTS**

#### Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID: FCS-SW-NNW Client: EHS International

Date Received: 08/19/10 Project: Federal Center South 10048-11, F&BI 008212

Lab ID: Date Extracted: 08/19/10 008212-03 1/5 Date Analyzed: 08/19/10 Data File: 081912.D Matrix: Soil Instrument: GCMS6 Units: mg/kg (ppm) Operator: YA

Lower Upper Surrogates: % Recovery: Limit: Limit: Anthracene-d10 86 50 150 Benzo(a)anthracene-d12 90 35 159

Concentration Compounds: mg/kg (ppm) Naphthalene 0.049 Acenaphthylene < 0.01 Acenaphthene < 0.01 Fluorene < 0.01 Phenanthrene < 0.01 Anthracene < 0.01 Fluoranthene < 0.01 Pyrene < 0.01 Benz(a)anthracene < 0.01 Chrysene < 0.01 Benzo(a)pyrene < 0.01 Benzo(b)fluoranthene < 0.01 Benzo(k)fluoranthene < 0.01 Indeno(1,2,3-cd)pyrene < 0.01 Dibenz(a,h)anthracene < 0.01 Benzo(g,h,i)perylene < 0.01

#### **ENVIRONMENTAL CHEMISTS**

#### Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID: FCS-SW-WNW Client: EHS International

Date Received: 08/19/10 Project: Federal Center South 10048-11, F&BI 008212

Lab ID: Date Extracted: 08/19/10 008212-04 1/5 Date Analyzed: 08/19/10 Data File: 081913.D Matrix: Soil Instrument: GCMS6 Units: mg/kg (ppm) Operator: YA

Lower Upper Surrogates: % Recovery: Limit: Limit: Anthracene-d10 86 50 150 Benzo(a)anthracene-d12 89 35 159

Concentration Compounds: mg/kg (ppm) Naphthalene 0.048 Acenaphthylene < 0.01 Acenaphthene 0.011 Fluorene < 0.01 Phenanthrene < 0.01 Anthracene < 0.01 Fluoranthene < 0.01 Pyrene < 0.01 Benz(a)anthracene < 0.01 Chrysene < 0.01 Benzo(a)pyrene < 0.01 Benzo(b)fluoranthene < 0.01 Benzo(k)fluoranthene < 0.01 Indeno(1,2,3-cd)pyrene < 0.01 Dibenz(a,h)anthracene < 0.01 Benzo(g,h,i)perylene < 0.01

#### **ENVIRONMENTAL CHEMISTS**

#### Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID: FCS-SW-NMID Client: EHS International

Date Received: 08/19/10 Project: Federal Center South 10048-11, F&BI 008212

Lab ID: Date Extracted: 08/19/10 008212-05 1/5 Date Analyzed: 08/19/10 Data File: 081914.D Matrix: Soil Instrument: GCMS6 Units: mg/kg (ppm) Operator: YA

Lower Upper Surrogates: % Recovery: Limit: Limit: Anthracene-d10 91 50 150 Benzo(a)anthracene-d12 92 35 159

Concentration Compounds: mg/kg (ppm) Naphthalene 0.013 Acenaphthylene < 0.01 Acenaphthene 0.11 Fluorene 0.033 Phenanthrene 0.036 Anthracene 0.010 Fluoranthene 0.021 Pyrene 0.015 Benz(a)anthracene < 0.01 Chrysene < 0.01 Benzo(a)pyrene < 0.01 Benzo(b)fluoranthene < 0.01 Benzo(k)fluoranthene < 0.01 Indeno(1,2,3-cd)pyrene < 0.01 Dibenz(a,h)anthracene < 0.01 Benzo(g,h,i)perylene < 0.01

#### **ENVIRONMENTAL CHEMISTS**

#### Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID: FCS-SW-SMID Client: EHS International

Date Received: 08/19/10 Project: Federal Center South 10048-11, F&BI 008212

Lab ID: Date Extracted: 08/19/10 008212-06 1/5 Date Analyzed: 08/19/10 Data File: 081915.D Matrix: Soil Instrument: GCMS6 Units: mg/kg (ppm) Operator: YA

Lower Upper Surrogates: % Recovery: Limit: Limit:

Anthracene-d10 87 50 150 Benzo(a)anthracene-d12 85 35 159

< 0.01

< 0.01

< 0.01

Concentration Compounds: mg/kg (ppm) Naphthalene < 0.01 Acenaphthylene < 0.01 Acenaphthene < 0.01 Fluorene < 0.01 Phenanthrene < 0.01 Anthracene < 0.01 Fluoranthene < 0.01 Pyrene < 0.01 Benz(a)anthracene < 0.01 Chrysene < 0.01 Benzo(a)pyrene < 0.01 Benzo(b)fluoranthene < 0.01 Benzo(k)fluoranthene < 0.01

Indeno(1,2,3-cd)pyrene

Dibenz(a,h)anthracene

Benzo(g,h,i)perylene

## **ENVIRONMENTAL CHEMISTS**

## Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID: FCS-SW-SE Client: EHS International

Date Received: 08/19/10 Project: Federal Center South 10048-11, F&BI 008212

Date Extracted:08/19/10Lab ID:008212-07 1/5Date Analyzed:08/19/10Data File:081916.DMatrix:SoilInstrument:GCMS6Units:mg/kg (ppm)Operator:YA

Lower Upper Surrogates: % Recovery: Limit: Limit: Anthracene-d10 92 50 150 Benzo(a)anthracene-d12 88 35 159

	Concentration
Compounds:	mg/kg (ppm)
Naphthalene	< 0.01
Acenaphthylene	< 0.01
Acenaphthene	< 0.01
Fluorene	< 0.01
Phenanthrene	< 0.01
Anthracene	< 0.01
Fluoranthene	< 0.01
Pyrene	< 0.01
Benz(a)anthracene	< 0.01
Chrysene	< 0.01
Benzo(a)pyrene	< 0.01
Benzo(b)fluoranthene	< 0.01
Benzo(k)fluoranthene	< 0.01
Indeno(1,2,3-cd)pyrene	< 0.01
Dibenz(a,h)anthracene	< 0.01
Benzo(g,h,i)perylene	< 0.01

#### **ENVIRONMENTAL CHEMISTS**

#### Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID: FCS-SW-E Client: EHS International

Date Received: 08/19/10 Project: Federal Center South 10048-11, F&BI 008212

Lab ID: Date Extracted: 08/19/10 008212-08 1/5 Date Analyzed: 08/19/10 Data File: 081917.D Matrix: Soil Instrument: GCMS6 Units: mg/kg (ppm) Operator: YA

Lower Upper Surrogates: % Recovery: Limit: Limit: Anthracene-d10 87 50 150 Benzo(a)anthracene-d12 87 35 159

Concentration Compounds: mg/kg (ppm) Naphthalene < 0.01 Acenaphthylene < 0.01 Acenaphthene < 0.01 Fluorene < 0.01 Phenanthrene < 0.01 Anthracene < 0.01 Fluoranthene < 0.01 Pyrene < 0.01 Benz(a)anthracene < 0.01 Chrysene < 0.01 Benzo(a)pyrene < 0.01 Benzo(b)fluoranthene < 0.01 Benzo(k)fluoranthene < 0.01 Indeno(1,2,3-cd)pyrene < 0.01 Dibenz(a,h)anthracene < 0.01 Benzo(g,h,i)perylene < 0.01

#### **ENVIRONMENTAL CHEMISTS**

#### Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID: FCS-SW-NE Client: **EHS International** 

Date Received: 08/19/10 Project: Federal Center South 10048-11, F&BI 008212

35

159

Lab ID: Date Extracted: 08/19/10 008212-09 1/5 Date Analyzed: 08/19/10 Data File: 081918.D Matrix: Soil Instrument: GCMS6 Units: mg/kg (ppm) Operator: YA

Upper Lower Surrogates: % Recovery: Limit: Limit: Anthracene-d10 86 50 150

85

Benzo(a)anthracene-d12 Concentration Compounds: mg/kg (ppm) Naphthalene < 0.01 Acenaphthylene < 0.01 Acenaphthene < 0.01 Fluorene < 0.01 Phenanthrene < 0.01 Anthracene < 0.01 Fluoranthene < 0.01 Pyrene < 0.01 Benz(a)anthracene < 0.01 Chrysene < 0.01 Benzo(a)pyrene < 0.01 Benzo(b)fluoranthene < 0.01 Benzo(k)fluoranthene < 0.01 Indeno(1,2,3-cd)pyrene < 0.01 Dibenz(a,h)anthracene < 0.01 Benzo(g,h,i)perylene < 0.01

#### **ENVIRONMENTAL CHEMISTS**

#### Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID: Method Blank Client: EHS International

Date Received: Not Applicable Project: Federal Center South 10048-11, F&BI 008212

08/19/10 Lab ID: Date Extracted: 00-1280 mb 1/5 Date Analyzed: 08/19/10 Data File: 081906.D Matrix: Soil Instrument: GCMS6 mg/kg (ppm) Units: Operator: YA

Lower Upper Surrogates: % Recovery: Limit: Limit: Anthracene-d10 87 50 150 Benzo(a)anthracene-d12 88 35 159

Concentration Compounds: mg/kg (ppm) Naphthalene < 0.01 Acenaphthylene < 0.01 Acenaphthene < 0.01 Fluorene < 0.01 Phenanthrene < 0.01 Anthracene < 0.01 Fluoranthene < 0.01 Pyrene < 0.01 Benz(a)anthracene < 0.01 Chrysene < 0.01 Benzo(a)pyrene < 0.01 Benzo(b)fluoranthene < 0.01 Benzo(k)fluoranthene < 0.01 Indeno(1,2,3-cd)pyrene < 0.01 Dibenz(a,h)anthracene < 0.01 Benzo(g,h,i)perylene < 0.01

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 08/26/10 Date Received: 08/19/10

Project: Federal Center South 10048-11, F&BI 008212

Date Extracted: 08/19/10

Date Analyzed: 08/19/10 and 08/20/10

## RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR PCBs REPORTED AS AROCLORS USING EPA METHOD 8082A

Results Reported on a Dry Weight Basis Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Arocle 1221	or <u>1232</u>	<u>1016</u>	<u>1242</u>	<u>1248</u>	<u>1254</u>	<u>1260</u>	Surrogate (% Rec.) (Limit 50-150)
FCS-SW-SSW 008212-01	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	118
FCS-SW-W 008212-02	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	113
FCS-SW-NNW 008212-03	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	107
FCS-SW-WNW 008212-04	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	126
FCS-SW-NMID 008212-05	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	95
FCS-SW-SMID 008212-06	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	113
FCS-SW-SE 008212-07	<0.1	< 0.1	<0.1	<0.1	<0.1	< 0.1	< 0.1	106
FCS-SW-E 008212-08	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	124
FCS-SW-NE 008212-09	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	108
Method Blank	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	118

## FRIEDMAN & BRUYA, INC. ENVIRONMENTAL CHEMISTS

Date of Report: 08/26/10 Date Received: 08/19/10

Project: Federal Center South 10048-11, F&BI 008212

# QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TPH AS GASOLINE

USING METHOD NWTPH-Gx

Laboratory Code: 008212-02 (Duplicate)

v	•	(Wet Wt)	(Wet Wt)	Relative Percent
	Reporting	Sample	Duplicate	Difference
Analyte	Units	Result	Result	(Limit 20)
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

		Percent				
	Reporting	Spike	Recovery	Acceptance		
Analyte	Units	Level	LCS	Criteria		
Gasoline	mg/kg (ppm)	20	90	61-153	•	

## FRIEDMAN & BRUYA, INC. ENVIRONMENTAL CHEMISTS

Date of Report: 08/26/10 Date Received: 08/19/10

Project: Federal Center South 10048-11, F&BI 008212

# QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TPH AS GASOLINE

## USING METHOD NWTPH-Gx

Laboratory Code: 008255-01 (Duplicate)

, and the second	•	(Wet Wt)	(Wet Wt)	Relative Percent
	Reporting	Sample	Duplicate	Difference
Analyte	Ûnits	Result	Result	(Limit 20)
Gasoline	mg/kg (ppm)	<10	<10	nm

Laboratory Code: Laboratory Control Sample

		Percent			
	Reporting	Spike	Recovery	Acceptance	
Analyte	Units	Level	LCS	Criteria	
Gasoline	mg/kg (ppm)	20	108	71-131	_

# FRIEDMAN & BRUYA, INC. ENVIRONMENTAL CHEMISTS

Date of Report: 08/26/10 Date Received: 08/19/10

Project: Federal Center South 10048-11, F&BI 008212

## QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 008212-05 (Matrix Spike)

			(Wet wt)	Percent	Percent		
	Reporting	Spike	Sample	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	Result	MS	MSD	Criteria	(Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	< 50	106	106	64-133	0

			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Diesel Extended	mg/kg (ppm)	5,000	105	58-147

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 08/26/10 Date Received: 08/19/10

Project: Federal Center South 10048-11, F&BI 008212

## QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 007248-05 (Matrix Spike)

				Percent	Percent		
	Reporting	Spike	Sample	Recovery	Recovery	Acceptance	RPD
Analyte	Ünits	Level	Result	MS	MSD	Criteria	(Limit 20)
Chromium	mg/kg (ppm)	50	4.50	97	88	51-132	10
Arsenic	mg/kg (ppm)	10	2.32	100 b	103 b	44-151	3
Selenium	mg/kg (ppm)	5	<1	105	88	52-128	18
Silver	mg/kg (ppm)	10	<1	110	104	69-125	6
Cadmium	mg/kg (ppm)	10	<1	111	107	83-120	4
Barium	mg/kg (ppm)	50	88.0	133 b	125 b	47-147	6
Lead	mg/kg (ppm)	20	4.46	102 b	98 b	65-126	4

			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Chromium	mg/kg (ppm)	50	110	79-125
Arsenic	mg/kg (ppm)	10	104	80-120
Selenium	mg/kg (ppm)	5	110	81-121
Silver	mg/kg (ppm)	10	109	84-117
Cadmium	mg/kg (ppm)	10	108	89-116
Barium	mg/kg (ppm)	50	102	88-113
Lead	mg/kg (ppm)	20	103	81-120

# FRIEDMAN & BRUYA, INC. ENVIRONMENTAL CHEMISTS

Date of Report: 08/26/10 Date Received: 08/19/10

Project: Federal Center South 10048-11, F&BI 008212

## QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL MERCURY USING EPA METHOD 1631E

Laboratory Code: 007248-05 (Matrix Spike)

				Percent	Percent		
	Reporting	Spike	Sample	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	Result	MS	MSD	Criteria	(Limit 20)
Mercury	mg/kg (ppm)	0.125	< 0.2	92	89	45-162	3

			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Mercury	mg/kg (ppm)	0.125	79	63-144

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 08/26/10 Date Received: 08/19/10

Project: Federal Center South 10048-11, F&BI 008212

## QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: 008146-01 (Matrix Spike)

Laboratory Code: 008146-01	(Matrix Spike)				
•				Percent	
	Reporting	Spike	Sample	Recovery	Acceptance
Analyte	Units	Level	Result	MS	Criteria
Dichlorodifluoromethane	mg/kg (ppm)	2.5	< 0.5	26	10-171
Chloromethane	mg/kg (ppm)	2.5	< 0.5	49	10-162
Vinyl chloride	mg/kg (ppm)	2.5	< 0.05	49	10-166
Bromomethane Chloroethane	mg/kg (ppm)	2.5 2.5	< 0.5	62 99	20-165
Trichlorofluoromethane	mg/kg (ppm)	2.5	<0.5 <0.5	85	10-161 10-164
Acetone	mg/kg (ppm) mg/kg (ppm)	12.5	<0.5	58	34-167
1,1-Dichloroethene	mg/kg (ppm)	2.5	< 0.05	72	21-148
Methylene chloride	mg/kg (ppm)	2.5	< 0.5	68	38-147
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	< 0.05	67	53-138
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	< 0.05	62	41-148
1,1-Dichloroethane	mg/kg (ppm)	2.5	< 0.05	65	54-134
2,2-Dichloropropane	mg/kg (ppm)	2.5	< 0.05	65	27-153
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	< 0.05	63	53-143
Chloroform	mg/kg (ppm)	2.5	< 0.05	68	59-132
2-Butanone (MEK)	mg/kg (ppm)	12.5	< 0.5	60	31-169
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	< 0.05	68	61-132
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	< 0.05	71	51-143
1,1-Dichloropropene	mg/kg (ppm)	2.5	< 0.05	67	50-135
Carbon tetrachloride Benzene	mg/kg (ppm)	2.5 2.5	<0.05 <0.03	72 68	48-141 58-129
Trichloroethene	mg/kg (ppm) mg/kg (ppm)	2.5	<0.03	68	58-129 57-133
1,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	66	63-134
Bromodichloromethane	mg/kg (ppm)	2.5	< 0.05	71	55-140
Dibromomethane	mg/kg (ppm)	2.5	< 0.05	68	59-138
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	<0.5	64	41-166
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	< 0.05	68	59-138
Toluene	mg/kg (ppm)	2.5	< 0.05	67	56-136
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	< 0.05	70	61-138
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	< 0.05	66 vo	72-129
2-Hexanone	mg/kg (ppm)	12.5	< 0.5	59	51-157
1,3-Dichloropropane	mg/kg (ppm)	2.5	< 0.05	65	65-132
Tetrachloroethene	mg/kg (ppm)	2.5	< 0.025	67	53-136
Dibromochloromethane	mg/kg (ppm)	2.5	< 0.05	70	57-131
1,2-Dibromoethane (EDB) Chlorobenzene	mg/kg (ppm)	2.5 2.5	<0.05 <0.05	65 vo 69	67-134 62-125
Ethylbenzene	mg/kg (ppm)	2.5 2.5	<0.05 <0.05	71	62-125
1,1,1,2-Tetrachloroethane	mg/kg (ppm) mg/kg (ppm)	2.5	< 0.05	73	65-134
m,p-Xylene	mg/kg (ppm)	5	<0.03	73 71	60-132
o-Xylene	mg/kg (ppm)	2.5	< 0.05	71	56-139
Styrene	mg/kg (ppm)	2.5	< 0.05	72	63-131
Isopropylbenzene	mg/kg (ppm)	2.5	< 0.05	74	48-145
Bromoform	mg/kg (ppm)	2.5	< 0.05	69	51-137
n-Propylbenzene	mg/kg (ppm)	2.5	< 0.05	72	52-141
Bromobenzene	mg/kg (ppm)	2.5	< 0.05	69	63-134
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	< 0.05	73	59-136
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	< 0.05	58	48-151
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	< 0.05	65	63-135
2-Chlorotoluene 4-Chlorotoluene	mg/kg (ppm)	2.5 2.5	<0.05 <0.05	70 71	54-138 56-135
tert-Butylbenzene	mg/kg (ppm)	2.5 2.5	<0.05 <0.05	72	55-140
1,2,4-Trimethylbenzene	mg/kg (ppm) mg/kg (ppm)	2.5	< 0.05	73	63-134
sec-Butylbenzene	mg/kg (ppm)	2.5	< 0.05	72	49-142
p-Isopropyltoluene	mg/kg (ppm)	2.5	< 0.05	73	61-136
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	< 0.05	70	56-134
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	< 0.05	70	55-130
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	< 0.05	70	57-134
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	< 0.5	54 vo	56-144
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	< 0.25	65	57-141
Hexachlorobutadiene	mg/kg (ppm)	2.5	< 0.25	63	52-147
Naphthalene	mg/kg (ppm)	2.5	< 0.1	54	35-174
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	< 0.25	58	31-180

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 08/26/10 Date Received: 08/19/10

Project: Federal Center South 10048-11, F&BI 008212

## QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: Laboratory Control Sample							
	D	C:1	Percent	Percent	A	DDD	
Analyte	Reporting Units	Spike Level	Recovery LCS	Recovery LCSD	Acceptance Criteria	RPD (Limit 20)	
Dichlorodifluoromethane	mg/kg (ppm)	2.5	86	89	10-142	3	
Chloromethane	mg/kg (ppm)	2.5	87	91	25-121	4	
Vinyl chloride	mg/kg (ppm)	2.5	99	104	36-123	5	
Bromomethane	mg/kg (ppm)	2.5	103	107	40-126	4	
Chloroethane	mg/kg (ppm)	2.5	115	121	10-281	5	
Trichlorofluoromethane	mg/kg (ppm)	2.5	116	120	17-167	3	
Acetone	mg/kg (ppm)	12.5	83	90	36-151	8	
1,1-Dichloroethene	mg/kg (ppm)	2.5 2.5	119 99	120 100	48-135 42-144	1 1	
Methylene chloride Methyl t-butyl ether (MTBE)	mg/kg (ppm) mg/kg (ppm)	2.5	104	100	73-112	3	
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	104	107	65-125	3 3	
1,1-Dichloroethane	mg/kg (ppm)	2.5	105	104	72-120	1	
2,2-Dichloropropane	mg/kg (ppm)	2.5	109	115	63-138	5	
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	105	106	73-120	1	
Chloroform	mg/kg (ppm)	2.5	109	108	73-123	1	
2-Butanone (MEK)	mg/kg (ppm)	12.5	92	95	50-133	3	
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	109	110	66-125	1	
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	114	115	71-131	1	
1,1-Dichloropropene	mg/kg (ppm)	2.5 2.5	109	110	74-120	1 2	
Carbon tetrachloride Benzene	mg/kg (ppm) mg/kg (ppm)	2.5	121 109	123 vo 109	69-121 73-115	0	
Trichloroethene	mg/kg (ppm)	2.5	110	110	75-113	0	
1,2-Dichloropropane	mg/kg (ppm)	2.5	105	108	78-119	3	
Bromodichloromethane	mg/kg (ppm)	2.5	112	114	68-140	2	
Dibromomethane	mg/kg (ppm)	2.5	107	109	73-126	2	
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	103	103	53-145	0	
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	110	111	80-129	1	
Toluene	mg/kg (ppm)	2.5	107	107	75-117	0	
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	114	113	76-138	1	
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	105	104	79-121	1	
2-Hexanone 1,3-Dichloropropane	mg/kg (ppm) mg/kg (ppm)	12.5 2.5	94 104	96 104	55-152 75-122	2	
Tetrachloroethene	mg/kg (ppm) mg/kg (ppm)	2.5	1104	110	75-122 80-120	0	
Dibromochloromethane	mg/kg (ppm)	2.5	112	113	73-126	1	
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	104	104	83-122	0	
Chlorobenzene	mg/kg (ppm)	2.5	109	109	79-113	0	
Ethylbenzene	mg/kg (ppm)	2.5	112	112	74-122	0	
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	117	117	74-138	0	
m,p-Xylene	mg/kg (ppm)	5	114	114	78-114	0	
o-Xylene	mg/kg (ppm)	2.5	114	115	81-116	1	
Styrene Isopropylbenzene	mg/kg (ppm)	2.5 2.5	116 117	116 118 vo	81-121 82-117	0 1	
Bromoform	mg/kg (ppm) mg/kg (ppm)	2.5	111	109	77-121	2	
n-Propylbenzene	mg/kg (ppm)	2.5	112	113	76-121	1	
Bromobenzene	mg/kg (ppm)	2.5	110	110	77-125	Ô	
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	112	115	77-121	3	
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	91	91	75-125	0	
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	100	100	69-128	0	
2-Chlorotoluene	mg/kg (ppm)	2.5	110	112	73-123	2	
4-Chlorotoluene	mg/kg (ppm)	2.5	109	112	74-123	3	
tert-Butylbenzene	mg/kg (ppm)	2.5 2.5	112 112	114 114	80-116 77-120	2 2	
1,2,4-Trimethylbenzene sec-Butylbenzene	mg/kg (ppm) mg/kg (ppm)	2.5	112	114	77-120 79-121	3	
p-Isopropyltoluene	mg/kg (ppm)	2.5	113	117	80-123	3	
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	107	108	81-115	1	
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	106	108	80-113	2	
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	108	110	81-116	2	
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	84	87	71-128	4	
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	105	112	80-118	6	
Hexachlorobutadiene	mg/kg (ppm)	2.5	100	105	74-128	5	
Naphthalene	mg/kg (ppm)	2.5	82	90	70-122	9	
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	92	97	76-125	5	

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 08/26/10 Date Received: 08/19/10

Project: Federal Center South 10048-11, F&BI 008212

## QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PNA'S BY EPA METHOD 8270D SIM

Laboratory Code: 008212-01 (Matrix Spike)

				Percent	Percent		
	Reporting	Spike	Sample	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	Result	MS	MSD	Criteria	(Limit 20)
Naphthalene	mg/kg (ppm)	0.17	< 0.01	83	87	33-140	5
Acenaphthylene	mg/kg (ppm)	0.17	< 0.01	79	83	43-128	5
Acenaphthene	mg/kg (ppm)	0.17	< 0.01	80	84	58-108	5
Fluorene	mg/kg (ppm)	0.17	< 0.01	86	91	57-113	6
Phenanthrene	mg/kg (ppm)	0.17	< 0.01	84	88	45-124	5
Anthracene	mg/kg (ppm)	0.17	< 0.01	76	80	42-132	5
Fluoranthene	mg/kg (ppm)	0.17	< 0.01	96	96	50-125	0
Pyrene	mg/kg (ppm)	0.17	< 0.01	94	96	41-135	2
Benz(a)anthracene	mg/kg (ppm)	0.17	< 0.01	80	85	47-113	6
Chrysene	mg/kg (ppm)	0.17	< 0.01	86	91	45-122	6
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	< 0.01	83	87	24-145	5
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	< 0.01	88	94	51-118	7
Benzo(a)pyrene	mg/kg (ppm)	0.17	< 0.01	81	85	30-134	5
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	< 0.01	74	82	40-138	10
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	< 0.01	77	86	51-122	11
Benzo(g,h,i)perylene	mg/kg (ppm)	0.17	< 0.01	76	85	54-115	11

Zazoracory coder Zazora		P	Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Ûnits	Level	LCS	Criteria
Naphthalene	mg/kg (ppm)	0.17	84	72-112
Acenaphthylene	mg/kg (ppm)	0.17	79	63-110
Acenaphthene	mg/kg (ppm)	0.17	81	70-111
Fluorene	mg/kg (ppm)	0.17	87	69-110
Phenanthrene	mg/kg (ppm)	0.17	85	68-111
Anthracene	mg/kg (ppm)	0.17	76	67-110
Fluoranthene	mg/kg (ppm)	0.17	91	62-114
Pyrene	mg/kg (ppm)	0.17	91	61-114
Benz(a)anthracene	mg/kg (ppm)	0.17	79	58-108
Chrysene	mg/kg (ppm)	0.17	85	61-112
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	85	54-119
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	87	61-123
Benzo(a)pyrene	mg/kg (ppm)	0.17	77	52-112
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	81	44-133
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	82	57-119
Benzo(g,h,i)perylene	mg/kg (ppm)	0.17	81	60-116

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 08/26/10 Date Received: 08/19/10

Project: Federal Center South 10048-11, F&BI 008212

## QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR POLYCHLORINATED BIPHENYLS AS AROCLOR 1016/1260 BY EPA METHOD 8082A

Laboratory Code: 008212-05 (Duplicate)

	Reporting	Sample	Duplicate	RPD
Analyte	Units	Result	Result	(Limit 20)
Aroclor 1016	mg/kg (ppm)	< 0.1	< 0.1	nm
Aroclor 1260	mg/kg (ppm)	< 0.1	< 0.1	nm

	Reporting	Spike	% Recovery	% Recovery	Acceptance	RPD
Analyte	Units	Level	LCS	LCSD	Criteria	(Limit 20)
Aroclor 1016	mg/kg (ppm)	0.8	114	110	60-142	4
Aroclor 1260	mg/kg (ppm)	0.8	122	127	63-144	4

#### **ENVIRONMENTAL CHEMISTS**

## **Data Qualifiers & Definitions**

- a The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- A1 More than one compound of similar molecule structure was identified with equal probability.
- b The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.
- c The presence of the analyte indicated may be due to carryover from previous sample injections.
- d The sample was diluted. Detection limits may be raised due to dilution.
- ds The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.
- dv Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.
- fb Analyte present in the blank and the sample.
- fc The compound is a common laboratory and field contaminant.
- hr The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.
- ht Analysis performed outside the method or client-specified holding time requirement.
- $ip\,$  Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.
- j The result is below normal reporting limits. The value reported is an estimate.
- J The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.
- jr The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- js The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- lc The presence of the compound indicated is likely due to laboratory contamination.
- L The reported concentration was generated from a library search.
- nm The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc The sample was received in a container not approved by the method. The value reported should be considered an estimate.
- $\mbox{pr}$  The sample was received with incorrect preservation. The value reported should be considered an estimate.
- $ve-Estimated\ concentration\ calculated\ for\ an\ analyte\ response\ above\ the\ valid\ instrument\ calibration\ range.\ A\ dilution\ is\ required\ to\ obtain\ an\ accurate\ quantification\ of\ the\ analyte.$
- vo The value reported fell outside the control limits established for this analyte.
- x The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

008212

SAMPLE CHAIN OF CUSTODY

City, State, ZIP BELLEYUE, WA Address 13228 NE 2549 St Company EHS-INTERNATIONAL, IN Send Report To Phone # 425 455 2757 Fax # 425-646 7247 MIGUEL CRIEGA

chez - d	8005	100				
C'Mallet 425-766-6691 Ce	REMARKS Coll reallts in to Ju	100AE-11	FEDERA CENTER SOUTH	PROJECT NAME/NO.	My My Mary Current Itary	- 1

Ŏ # Standard (2,Weeks)

RUSH 24 HCs 747 TURNAROUND TIME

Rush charges authorized by:

XDispose after 30 days SAMPLE DISPOSAL

Return samples

Will call with instructions

Fax (206) 283-5044	Ph. (206) 285-8282	Seattle, WA 98119-2029	<u> </u>	Friedman & Bruya, Inc.		NE	705-5W-E	FC5-5W-5E	PCS-SW-SMID	5		$\omega$		RC5-5W-SEW	Sample ID	
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by:	Relinquished by:	by	Relinquished by:	SIGN		<	*			*	6	1	( )	01A#6/18/10	Date Sampled	
		B	1 Phil	SIGNATURE		<b>76</b> 55	1645	16:35	16:25	16:00	15:50	15:35	15:24	15:10	Time Sampled	
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d at &	1	1	8/19/10	DATE	-										N <sub>0</sub>	
C		1	7:58	TIME											Notes	

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#### **ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D. Charlene Morrow, M.S. Yelena Aravkina, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

August 13, 2010

Miguel Ortega, Project Manager EHS International 12810 NE 20<sup>th</sup> St, Ste 100 Bellevue, WA 98005

Dear Mr. Ortega:

Included are the results from the testing of material submitted on August 6, 2010 from the Federal Center South 10048-11, F&BI 008065 project. There are 20 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures c: Diana Phelan NAA0813R.DOC

# FRIEDMAN & BRUYA, INC. ENVIRONMENTAL CHEMISTS

#### **CASE NARRATIVE**

This case narrative encompasses samples received on August 6, 2010 by Friedman & Bruya, Inc. from the EHS International Federal Center South 10048-11, F&BI 008065 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u> <u>EHS International</u>

008065-01 FCS-HP-01

The 8260C calibration standard did not pass the acceptance criteria for several compounds. The data were flagged accordingly.

All other quality control requirements were acceptable.

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 08/13/10 Date Received: 08/06/10

Project: Federal Center South 10048-11, F&BI 008065

Date Extracted: 08/06/10 Date Analyzed: 08/06/10

## RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Results Reported on a Dry Weight Basis Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	Ethyl <u>Benzene</u>	Total <u>Xylenes</u>	Gasoline <u>Range</u>	Surrogate (% Recovery) (Limit 50-150)
FCS-HP-01 008065-01	<0.02	<0.02	0.08	0.60	36	68
Method Blank	<0.02	< 0.02	< 0.02	< 0.06	<2	59

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 08/13/10 Date Received: 08/06/10

Project: Federal Center South 10048-11, F&BI 008065

Date Extracted: 08/06/10 Date Analyzed: 08/07/10

## RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C <sub>10</sub> -C <sub>25</sub> )	Motor Oil Range (C <sub>25</sub> -C <sub>36</sub> )	Surrogate (% Recovery) (Limit 53-144)
FCS-HP-01 008065-01	66	400	97
Method Blank	<50	<250	100

### **ENVIRONMENTAL CHEMISTS**

## Analysis For Total Metals By EPA Method 200.8

Client ID: FCS-HP-01 Client: EHS International

Date Received: 08/06/10 Project: Federal Center South 10048-11

 Date Extracted:
 08/06/10
 Lab ID:
 008065-01

 Date Analyzed:
 08/09/10
 Data File:
 008065-01.018

 Matrix:
 Soil
 Instrument:
 ICPMS1

 Units:
 mg/kg (ppm)
 Operator:
 AP

Lower Upper Internal Standard: % Recovery: Limit: Limit: Germanium 61 60 125

 Germanium
 61
 60
 125

 Indium
 60
 60
 125

 Holmium
 64
 60
 125

Analyte: Concentration mg/kg (ppm)

 Chromium
 7.08

 Arsenic
 2.27

 Selenium
 <1</td>

 Silver
 <1</td>

 Cadmium
 <1</td>

 Barium
 19.1

 Lead
 4.81

#### **ENVIRONMENTAL CHEMISTS**

## Analysis For Total Metals By EPA Method 200.8

Client ID: Method Blank Client: **EHS International** 

Date Received: Project: Federal Center South 10048-11 NA

Lab ID: Date Extracted: 08/06/10 I0-427 mb Date Analyzed: 08/09/10 Data File: I0-427 mb.008 Matrix: Soil Instrument: ICPMS1 mg/kg (ppm) Units: AP Operator:

Lower

		Lower	Upper
Internal Standard:	% Recovery:	Limit:	Limit:
Germanium	71	60	125
Indium	70	60	125
Holmium	75	60	125

Concentration mg/kg (ppm)

Chromium <1 Arsenic <1 Selenium <1 Silver <1 Cadmium <1 Barium <1 Lead <1

Analyte:

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 08/13/10 Date Received: 08/06/10

Project: Federal Center South 10048-11, F&BI 008065

Date Extracted: 08/06/10 Date Analyzed: 08/06/10

## RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLES FOR TOTAL MERCURY USING EPA METHOD 1631E

Results Reported on a Dry Weight Basis Results Reported as mg/kg (ppm)

Sample ID	<u>Total Mercury</u>
Laboratory ID	·
FCS-HP-01	< 0.2
008065-01	
Method Blank	< 0.2

## ENVIRONMENTAL CHEMISTS

## Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: FCS-HP-01 Client: EHS International

Date Received: 08/06/10 Project: Federal Center South 10048-11

Date Extracted:08/06/10Lab ID:008065-01Date Analyzed:08/06/10Data File:080615.DMatrix:SoilInstrument:GCMS5Units:mg/kg (ppm)Operator:MB

		Lower	Upper
Surrogates:	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-d4	104	42	152
Toluene-d8	104	36	149
4-Bromofluorobenzene	100	50	150

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
_		_	
Dichlorodifluoromethane	<0.5 ca	1,3-Dichloropropane	< 0.05
Chloromethane	<0.5 ca	Tetrachloroethene	< 0.025
Vinyl chloride	< 0.05	Dibromochloromethane	< 0.05
Bromomethane	< 0.5	1,2-Dibromoethane (EDB)	< 0.05
Chloroethane	< 0.5	Chlorobenzene	< 0.05
Trichlorofluoromethane	< 0.5	Ethylbenzene	< 0.05
Acetone	<0.5 ca	1,1,1,2-Tetrachloroethane	< 0.05
1,1-Dichloroethene	< 0.05	m,p-Xylene	0.12
Methylene chloride	< 0.5	o-Xylene	0.13
Methyl t-butyl ether (MTBE)	< 0.05	Styrene	< 0.05
trans-1,2-Dichloroethene	< 0.05	Isopropylbenzene	< 0.05
1,1-Dichloroethane	< 0.05	Bromoform	< 0.05
2,2-Dichloropropane	< 0.05	n-Propylbenzene	< 0.05
cis-1,2-Dichloroethene	< 0.05	Bromobenzene	< 0.05
Chloroform	< 0.05	1,3,5-Trimethylbenzene	0.15
2-Butanone (MEK)	< 0.5	1,1,2,2-Tetrachloroethane	< 0.05
1,2-Dichloroethane (EDC)	< 0.05	1,2,3-Trichloropropane	< 0.05
1,1,1-Trichloroethane	< 0.05	2-Chlorotoluene	< 0.05
1,1-Dichloropropene	< 0.05	4-Chlorotoluene	< 0.05
Carbon tetrachloride	< 0.05	tert-Butylbenzene	< 0.05
Benzene	< 0.03	1,2,4-Trimethylbenzene	0.56
Trichloroethene	0.037	sec-Butylbenzene	< 0.05
1,2-Dichloropropane	< 0.05	p-Isopropyltoluene	0.077
Bromodichloromethane	< 0.05	1,3-Dichlorobenzene	< 0.05
Dibromomethane	< 0.05	1,4-Dichlorobenzene	< 0.05
4-Methyl-2-pentanone	< 0.5	1,2-Dichlorobenzene	< 0.05
cis-1,3-Dichloropropene	< 0.05	1,2-Dibromo-3-chloropropane	< 0.5
Toluene	< 0.05	1,2,4-Trichlorobenzene	< 0.25
trans-1,3-Dichloropropene	< 0.05	Hexachlorobutadiene	< 0.25
1,1,2-Trichloroethane	< 0.05	Naphthalene	2.2
2-Hexanone	< 0.5	1,2,3-Trichlorobenzene	< 0.25

## ENVIRONMENTAL CHEMISTS

## Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: Method Blank Client: EHS International

Date Received: Not Applicable Project: Federal Center South 10048-11

Date Extracted:08/06/10Lab ID:00-1170 mbDate Analyzed:08/06/10Data File:080606.DMatrix:SoilInstrument:GCMS5Units:mg/kg (ppm)Operator:MB

		Lower	Upper
Surrogates:	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-d4	123	42	152
Toluene-d8	125	36	149
4-Bromofluorobenzene	126	50	150

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
_	0 0 11	_	
Dichlorodifluoromethane	<0.5 ca	1,3-Dichloropropane	< 0.05
Chloromethane	<0.5 ca	Tetrachloroethene	< 0.025
Vinyl chloride	< 0.05	Dibromochloromethane	< 0.05
Bromomethane	< 0.5	1,2-Dibromoethane (EDB)	< 0.05
Chloroethane	< 0.5	Chlorobenzene	< 0.05
Trichlorofluoromethane	< 0.5	Ethylbenzene	< 0.05
Acetone	<0.5 ca	1,1,1,2-Tetrachloroethane	< 0.05
1,1-Dichloroethene	< 0.05	m,p-Xylene	< 0.1
Methylene chloride	< 0.5	o-Xylene	< 0.05
Methyl t-butyl ether (MTBE)	< 0.05	Styrene	< 0.05
trans-1,2-Dichloroethene	< 0.05	Isopropylbenzene	< 0.05
1,1-Dichloroethane	< 0.05	Bromoform	< 0.05
2,2-Dichloropropane	< 0.05	n-Propylbenzene	< 0.05
cis-1,2-Dichloroethene	< 0.05	Bromobenzene	< 0.05
Chloroform	< 0.05	1,3,5-Trimethylbenzene	< 0.05
2-Butanone (MEK)	< 0.5	1,1,2,2-Tetrachloroethane	< 0.05
1,2-Dichloroethane (EDC)	< 0.05	1,2,3-Trichloropropane	< 0.05
1,1,1-Trichloroethane	< 0.05	2-Chlorotoluene	< 0.05
1,1-Dichloropropene	< 0.05	4-Chlorotoluene	< 0.05
Carbon tetrachloride	< 0.05	tert-Butylbenzene	< 0.05
Benzene	< 0.03	1,2,4-Trimethylbenzene	< 0.05
Trichloroethene	< 0.03	sec-Butylbenzene	< 0.05
1,2-Dichloropropane	< 0.05	p-Isopropyltoluene	< 0.05
Bromodichloromethane	< 0.05	1,3-Dichlorobenzene	< 0.05
Dibromomethane	< 0.05	1,4-Dichlorobenzene	< 0.05
4-Methyl-2-pentanone	< 0.5	1,2-Dichlorobenzene	< 0.05
cis-1,3-Dichloropropene	< 0.05	1,2-Dibromo-3-chloropropane	< 0.5
Toluene	< 0.05	1,2,4-Trichlorobenzene	< 0.25
trans-1,3-Dichloropropene	< 0.05	Hexachlorobutadiene	< 0.25
1,1,2-Trichloroethane	< 0.05	Naphthalene	< 0.25
2-Hexanone	< 0.5	1,2,3-Trichlorobenzene	< 0.25

#### **ENVIRONMENTAL CHEMISTS**

## Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID: FCS-HP-01 Client: EHS International

Date Received: 08/06/10 Project: Federal Center South 10048-11

Lab ID: Date Extracted: 08/09/10 008065-01 1/5 Date Analyzed: 08/10/10 Data File: 081016.D Matrix: Soil Instrument: GCMS6 Units: mg/kg (ppm) Operator: YA

Lower Upper Surrogates: % Recovery: Limit: Limit: Anthracene-d10 93 50 150 Benzo(a)anthracene-d12 106 35 159

Concentration Compounds: mg/kg (ppm) Naphthalene 0.036 Acenaphthylene < 0.01 Acenaphthene 0.33 Fluorene 0.088 Phenanthrene 0.060 Anthracene 0.016 Fluoranthene 0.023 Pyrene 0.016 Benz(a)anthracene < 0.01 Chrysene < 0.01 Benzo(a)pyrene < 0.01 Benzo(b)fluoranthene < 0.01 Benzo(k)fluoranthene < 0.01 Indeno(1,2,3-cd)pyrene < 0.01 Dibenz(a,h)anthracene < 0.01 Benzo(g,h,i)perylene < 0.01

#### **ENVIRONMENTAL CHEMISTS**

#### Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID: Method Blank Client: EHS International

Date Received: Not Applicable Project: Federal Center South 10048-11

08/09/10 Lab ID: Date Extracted: 00-1205 mb 1/5 Date Analyzed: 08/09/10 Data File: 080905.D Matrix: Soil Instrument: GCMS6 Units: mg/kg (ppm) Operator: YA

Lower Upper Surrogates: % Recovery: Limit: Limit: Anthracene-d10 97 50 150 Benzo(a)anthracene-d12 109 35 159

Concentration Compounds: mg/kg (ppm) Naphthalene < 0.01 Acenaphthylene < 0.01 Acenaphthene < 0.01 Fluorene < 0.01 Phenanthrene < 0.01 Anthracene < 0.01 Fluoranthene < 0.01 Pyrene < 0.01 Benz(a)anthracene < 0.01 Chrysene < 0.01 Benzo(a)pyrene < 0.01 Benzo(b)fluoranthene < 0.01 Benzo(k)fluoranthene < 0.01 Indeno(1,2,3-cd)pyrene < 0.01 Dibenz(a,h)anthracene < 0.01 Benzo(g,h,i)perylene < 0.01

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 08/13/10 Date Received: 08/06/10

Project: Federal Center South 10048-11, F&BI 008065

Date Extracted: 08/09/10 Date Analyzed: 08/09/10

## RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR PCBs REPORTED AS AROCLORS USING EPA METHOD 8082A

Results Reported on a Dry Weight Basis Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Aroclo <u>1221</u>	or <u>1232</u>	<u>1016</u>	1242	<u>1248</u>	<u>1254</u>	<u>1260</u>	Surrogate (% Rec.) (Limit 50-150)
FCS-HP-01 008065-01	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	102
Method Blank	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	110

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 08/13/10 Date Received: 08/06/10

Project: Federal Center South 10048-11, F&BI 008065

## QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Laboratory Code: 008025-16 (Duplicate)

J	Reporting	(Wet Wt) Sample	(Wet Wt) Duplicate	Relative Percent Difference
Analyte	Units	Result	Result	(Limit 20)
				(LIIIIt £0)
Benzene	mg/kg (ppm)	< 0.02	< 0.02	nm
Toluene	mg/kg (ppm)	< 0.02	< 0.02	nm
Ethylbenzene	mg/kg (ppm)	< 0.02	< 0.02	nm
Xylenes	mg/kg (ppm)	< 0.06	< 0.06	nm
Gasoline	mg/kg (ppm)	<2	<2	nm

		Percent				
	Reporting	Spike	Recovery	Acceptance		
Analyte	Units	Level	LCS	Criteria		
Benzene	mg/kg (ppm)	0.5	79	69-120		
Toluene	mg/kg (ppm)	0.5	86	70-117		
Ethylbenzene	mg/kg (ppm)	0.5	85	65-123		
Xylenes	mg/kg (ppm)	1.5	85	66-120		
Gasoline	mg/kg (ppm)	20	85	71-131		

# FRIEDMAN & BRUYA, INC. ENVIRONMENTAL CHEMISTS

Date of Report: 08/13/10 Date Received: 08/06/10

Project: Federal Center South 10048-11, F&BI 008065

## QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 008080-01 (Matrix Spike)

			(Wet wt)	Percent	Percent		
	Reporting	Spike	Sample	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	Result	MS	MSD	Criteria	(Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	< 50	110	109	64-133	1

			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Diesel Extended	mg/kg (ppm)	5,000	105	58-147

#### ENVIRONMENTAL CHEMISTS

Date of Report: 08/13/10 Date Received: 08/06/10

Project: Federal Center South 10048-11, F&BI 008065

## QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 008019-19 (Matrix Spike)

				Percent	Percent		
	Reporting	Spike	Sample	Recovery	Recovery	Acceptance	RPD
Analyte	Ünits	Level	Result	MS	MSD	Criteria	(Limit 20)
Chromium	mg/kg (ppm)	50	9.24	90	91	51-132	1
Arsenic	mg/kg (ppm)	10	2.34	101 b	101 b	44-151	0
Selenium	mg/kg (ppm)	5	<1	93	92	52-128	1
Silver	mg/kg (ppm)	10	<1	107	107	69-125	0
Cadmium	mg/kg (ppm)	10	<1	99	99	83-120	0
Barium	mg/kg (ppm)	50	25.6	99 b	105 b	47-147	6
Lead	mg/kg (ppm)	20	15.6	109 b	113 b	65-126	4

			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Chromium	mg/kg (ppm)	50	97	79-125
Arsenic	mg/kg (ppm)	10	93	80-120
Selenium	mg/kg (ppm)	5	88	81-121
Silver	mg/kg (ppm)	10	103	84-117
Cadmium	mg/kg (ppm)	10	100	89-116
Barium	mg/kg (ppm)	50	100	88-113
Lead	mg/kg (ppm)	20	103	81-120

# FRIEDMAN & BRUYA, INC. ENVIRONMENTAL CHEMISTS

Date of Report: 08/13/10 Date Received: 08/06/10

Project: Federal Center South 10048-11, F&BI 008065

## QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL MERCURY USING EPA METHOD 1631E

Laboratory Code: 008019-19 (Matrix Spike)

				Percent	Percent		
	Reporting	Spike	Sample	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	Result	MS	MSD	Criteria	(Limit 20)
Mercury	mg/kg (ppm)	0.125	< 0.2	92	93	45-162	1

			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Mercury	mg/kg (ppm)	0.125	106	63-144

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 08/13/10 Date Received: 08/06/10

Project: Federal Center South 10048-11, F&BI 008065

## QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: 008033-01 (Matrix Spike)

J	1 /			Percent	
	Reporting	Spike	Sample	Recovery	Acceptance
Analyte	Units	Level	Result	MS	Criteria
Dichlorodifluoromethane	mg/kg (ppm)	2.5	< 0.5	16	10-171
Chloromethane	mg/kg (ppm)	2.5	< 0.5	42	10-162
Vinyl chloride	mg/kg (ppm)	2.5	< 0.05	49	10-166
Bromomethane	mg/kg (ppm)	2.5	< 0.5	60	20-165
Chloroethane	mg/kg (ppm)	2.5	< 0.5	92	10-161
Trichlorofluoromethane	mg/kg (ppm)	2.5	< 0.5	94	10-164
Acetone	mg/kg (ppm)	12.5	< 0.5	58	34-167
1,1-Dichloroethene	mg/kg (ppm)	2.5	< 0.05	77	21-148
Methylene chloride	mg/kg (ppm)	2.5	< 0.5	60	38-147
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	< 0.05	68	53-138
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	< 0.05	73	41-148
1,1-Dichloroethane	mg/kg (ppm)	2.5	< 0.05	75	54-134
2,2-Dichloropropane	mg/kg (ppm)	2.5	< 0.05	68	27-153
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	< 0.05	77	53-143
Chloroform	mg/kg (ppm)	2.5	< 0.05	80	59-132
2-Butanone (MEK)	mg/kg (ppm)	12.5	< 0.5	62	31-169
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	< 0.05	78	61-132
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	< 0.05	80	51-143
1,1-Dichloropropene	mg/kg (ppm)	2.5	< 0.05	77	50-135
Carbon tetrachloride	mg/kg (ppm)	2.5	< 0.05	81	48-141
Benzene	mg/kg (ppm)	2.5	< 0.03	80	58-129
Trichloroethene	mg/kg (ppm)	2.5	< 0.03	81	57-133
1,2-Dichloropropane Bromodichloromethane	mg/kg (ppm)	2.5 2.5	<0.05 <0.05	80 83	63-134 55-140
Dibromomethane	mg/kg (ppm)	2.5	< 0.05	78	59-138
4-Methyl-2-pentanone	mg/kg (ppm) mg/kg (ppm)	12.5	<0.03	67	41-166
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	< 0.05	81	59-138
Toluene	mg/kg (ppm)	2.5	< 0.05	79	56-136
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	< 0.05	77	61-138
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	< 0.05	74	72-129
2-Hexanone	mg/kg (ppm)	12.5	< 0.5	62	51-157
1,3-Dichloropropane	mg/kg (ppm)	2.5	< 0.05	74	65-132
Tetrachloroethene	mg/kg (ppm)	2.5	< 0.025	80	53-136
Dibromochloromethane	mg/kg (ppm)	2.5	< 0.05	77	57-131
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	< 0.05	72	67-134
Chlorobenzene	mg/kg (ppm)	2.5	< 0.05	81	62-125
Ethylbenzene	mg/kg (ppm)	2.5	< 0.05	84	62-129
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	< 0.05	84	65-134
m,p-Xylene	mg/kg (ppm)	5	< 0.1	86	60-132
o-Xylene	mg/kg (ppm)	2.5	< 0.05	84	56-139
Styrene	mg/kg (ppm)	2.5	< 0.05	86	63-131
Isopropylbenzene	mg/kg (ppm)	2.5	< 0.05	87	48-145
Bromoform	mg/kg (ppm)	2.5	< 0.05	75	51-137
n-Propylbenzene	mg/kg (ppm)	2.5	< 0.05	86	52-141
Bromobenzene	mg/kg (ppm)	2.5	< 0.05	82	63-134
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	< 0.05	85	59-136
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	< 0.05	63	48-151
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	< 0.05	68	63-135
2-Chlorotoluene	mg/kg (ppm)	2.5 2.5	< 0.05	84	54-138
4-Chlorotoluene	mg/kg (ppm)	2.5 2.5	<0.05 <0.05	84 85	56-135 55-140
tert-Butylbenzene	mg/kg (ppm)	2.5	<0.05	85	63-134
1,2,4-Trimethylbenzene sec-Butylbenzene	mg/kg (ppm)	2.5	< 0.05	85	49-142
p-Isopropyltoluene	mg/kg (ppm) mg/kg (ppm)	2.5	<0.05	87	61-136
1.3-Dichlorobenzene	mg/kg (ppm)	2.5	< 0.05	81	56-134
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	< 0.05	80	55-130
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	< 0.05	79	57-134
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	<0.5	56	56-144
1.2.4-Trichlorobenzene	mg/kg (ppm)	2.5	< 0.25	74	57-141
Hexachlorobutadiene	mg/kg (ppm)	2.5	< 0.25	79	52-147
Naphthalene	mg/kg (ppm)	2.5	< 0.05	56	35-174
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	< 0.25	65	31-180
	0 0 (FF7				

## ENVIRONMENTAL CHEMISTS

Date of Report: 08/13/10 Date Received: 08/06/10

Project: Federal Center South 10048-11, F&BI 008065

## QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260C

J	1		Percent	Percent		
	Reporting	Spike	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	LCS	LCSD	Criteria	(Limit 20)
Dichlorodifluoromethane	mg/kg (ppm)	2.5	48	37	10-142	26 vo
Chloromethane	mg/kg (ppm)	2.5	65	54	25-121	18
Vinyl chloride	mg/kg (ppm)	2.5	80	67	36-123	18
Bromomethane	mg/kg (ppm)	2.5	79	66	40-126	18
Chloroethane	mg/kg (ppm)	2.5	84	77	10-281	9
Trichlorofluoromethane	mg/kg (ppm)	2.5	107	90	17-167	17
Acetone	mg/kg (ppm)	12.5	74	67	36-151	10
1,1-Dichloroethene	mg/kg (ppm)	2.5	103	94	48-135	9
Methylene chloride	mg/kg (ppm)	2.5	87	79	42-144	10
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	92	82	73-112	11
trans-1.2-Dichloroethene	mg/kg (ppm)	2.5	94	86	65-125	9
1,1-Dichloroethane	mg/kg (ppm)	2.5	95	86	72-120	10
2,2-Dichloropropane	mg/kg (ppm)	2.5	100	89	63-138	12
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	99	87	73-120	13
Chloroform	mg/kg (ppm)	2.5	98	89	73-123	10
2-Butanone (MEK)	mg/kg (ppm)	12.5	83	74	50-133	11
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	96	87	66-125	10
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	102	90	71-131	12
1,1-Dichloropropene	mg/kg (ppm)	2.5	101	90	74-120	12
Carbon tetrachloride	mg/kg (ppm)	2.5	103	91	69-121	12
Benzene	mg/kg (ppm)	2.5	99	89	73-115	11
Trichloroethene	mg/kg (ppm)	2.5	100	89	75-120	12
1,2-Dichloropropane	mg/kg (ppm)	2.5	100	89	78-119	12
Bromodichloromethane	mg/kg (ppm)	2.5	104	92	68-140	12
Dibromomethane	mg/kg (ppm)	2.5	99	89	73-126	11
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	93	83	53-145	11
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	105	94	80-129	11
Toluene	mg/kg (ppm)	2.5	101	89	75-117	13
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	102	91	76-138	11
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	96	86	79-121	11
2-Hexanone	mg/kg (ppm)	12.5	87	77	55-152	12
1,3-Dichloropropane	mg/kg (ppm)	2.5	96	86	75-122	11
Tetrachloroethene	mg/kg (ppm)	2.5	102	90	80-120	12
Dibromochloromethane	mg/kg (ppm)	2.5	103	91	73-126	12
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	96	86	83-122	11
Chlorobenzene	mg/kg (ppm)	2.5	100	90	79-113	11
Ethylbenzene	mg/kg (ppm)	2.5	103	93	74-122	10
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	105	94	74-138	11
m,p-Xylene	mg/kg (ppm)	5	104	94	78-114	10
o-Xylene	mg/kg (ppm)	2.5	106	95	81-116	11
Styrene	mg/kg (ppm)	2.5	107	96	81-121	11
Isopropylbenzene	mg/kg (ppm)	2.5	108	97	82-117	11
Bromoform	mg/kg (ppm)	2.5	95	86	77-121	10
n-Propylbenzene	mg/kg (ppm)	2.5	106	96	76-121	10
Bromobenzene	mg/kg (ppm)	2.5	104	93	77-125	11
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	107	96	77-121	11
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	88	80	75-125	10
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	89	80	69-128	11
2-Chlorotoluene	mg/kg (ppm)	2.5	105	95	73-123	10
4-Chlorotoluene	mg/kg (ppm)	2.5	104	94	74-123	10
tert-Butylbenzene	mg/kg (ppm)	2.5	107	96	80-116	11
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	107	96	77-120	11
sec-Butylbenzene	mg/kg (ppm)	2.5	107	96	79-121	11
p-Isopropyltoluene	mg/kg (ppm)	2.5	111	98	80-123	12
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	101	90	81-115	12
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	99	90	80-113	10
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	102	91	81-116	11
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	91	78	71-128	15
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	109	93	80-118	16
Hexachlorobutadiene	mg/kg (ppm)	2.5	103	89	74-128	15
Naphthalene	mg/kg (ppm)	2.5	95	82	70-122	15
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	99	85	76-125	15

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 08/13/10 Date Received: 08/06/10

Project: Federal Center South 10048-11, F&BI 008065

## QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PNA'S BY EPA METHOD 8270D SIM

Laboratory Code: 008065-01 (Matrix Spike)

				Percent	Percent		
	Reporting	Spike	Sample	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	Result	MS	MSD	Criteria	(Limit 20)
Naphthalene	mg/kg (ppm)	0.17	0.036	137 b	109 b	33-140	23 vo
Acenaphthylene	mg/kg (ppm)	0.17	< 0.01	110	108	43-128	2
Acenaphthene	mg/kg (ppm)	0.17	0.33	118 b	114 b	58-108	3
Fluorene	mg/kg (ppm)	0.17	0.088	104 b	104 b	57-113	0
Phenanthrene	mg/kg (ppm)	0.17	0.06	105 b	101 b	45-124	4
Anthracene	mg/kg (ppm)	0.17	0.016	97	95	42-132	2
Fluoranthene	mg/kg (ppm)	0.17	0.023	99	107	50-125	8
Pyrene	mg/kg (ppm)	0.17	0.016	102	108	41-135	6
Benz(a)anthracene	mg/kg (ppm)	0.17	< 0.01	109	108	47-113	1
Chrysene	mg/kg (ppm)	0.17	< 0.01	116	116	45-122	0
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	< 0.01	119	113	24-145	5
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	< 0.01	114	112	51-118	2
Benzo(a)pyrene	mg/kg (ppm)	0.17	< 0.01	113	110	30-134	3
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	< 0.01	125	126	40-138	1
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	< 0.01	123 vo	120	51-122	2
Benzo(g,h,i)perylene	mg/kg (ppm)	0.17	< 0.01	119 vo	116 vo	54-115	3

			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Naphthalene	mg/kg (ppm)	0.17	105 vo	72-112 vo
Acenaphthylene	58 vo	0.17	105	63-110
Acenaphthene	mg/kg (ppm)	0.17	104	70-111
Fluorene	mg/kg (ppm)	0.17	106	69-110
Phenanthrene	mg/kg (ppm)	0.17	105	68-111
Anthracene	mg/kg (ppm)	0.17	93	67-110
Fluoranthene	mg/kg (ppm)	0.17	101	62-114
Pyrene	mg/kg (ppm)	0.17	101	61-114
Benz(a)anthracene	mg/kg (ppm)	0.17	102	58-108
Chrysene	mg/kg (ppm)	0.17	107	61-112
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	107	54-119
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	107	61-123
Benzo(a)pyrene	mg/kg (ppm)	0.17	100	52-112
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	119	44-133
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	116	57-119
Benzo(g,h,i)perylene	mg/kg (ppm)	0.17	113	60-116

## ENVIRONMENTAL CHEMISTS

Date of Report: 08/13/10 Date Received: 08/06/10

Project: Federal Center South 10048-11, F&BI 008065

## QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR POLYCHLORINATED BIPHENYLS AS AROCLOR 1016/1260 BY EPA METHOD 8082A

Laboratory Code: 008065-01 (Duplicate)

	Reporting	Sample	Duplicate	RPD
Analyte	Units	Result	Result	(Limit 20)
Aroclor 1016	mg/kg (ppm)	< 0.1	< 0.1	nm
Aroclor 1260	mg/kg (ppm)	< 0.1	< 0.1	nm

	Reporting	Spike	% Recovery	% Recovery	Acceptance	RPD
Analyte	Units	Level	LCS	LCSD	Criteria	(Limit 20)
Aroclor 1016	mg/kg (ppm)	0.8	92	100	60-142	8
Aroclor 1260	mg/kg (ppm)	0.8	106	117	63-144	10

#### **ENVIRONMENTAL CHEMISTS**

## **Data Qualifiers & Definitions**

- a The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- A1 More than one compound of similar molecule structure was identified with equal probability.
- b The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.
- c The presence of the analyte indicated may be due to carryover from previous sample injections.
- d The sample was diluted. Detection limits may be raised due to dilution.
- ds The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.
- dv Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.
- fb Analyte present in the blank and the sample.
- fc The compound is a common laboratory and field contaminant.
- hr The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.
- ht Analysis performed outside the method or client-specified holding time requirement.
- $ip\,$  Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.
- j The result is below normal reporting limits. The value reported is an estimate.
- J The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.
- jr The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- js The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- lc The presence of the compound indicated is likely due to laboratory contamination.
- L The reported concentration was generated from a library search.
- nm The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc The sample was received in a container not approved by the method. The value reported should be considered an estimate.
- $\operatorname{pr}$  The sample was received with incorrect preservation. The value reported should be considered an estimate.
- $ve-Estimated\ concentration\ calculated\ for\ an\ analyte\ response\ above\ the\ valid\ instrument\ calibration\ range.\ A\ dilution\ is\ required\ to\ obtain\ an\ accurate\ quantification\ of\ the\ analyte.$
- vo The value reported fell outside the control limits established for this analyte.
- x The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

FORMAN COCYCOC.DOC PAGE (SOC) 200-20-41 PM. (2006) 2005-8208 Seconda, WA 98119-2029 80 % Park Avenue West Miedman & Bruga, Inc. Phoene # 405 165-2759 pax # 405-646-7247 Results. 105-4P-01 City, State, IIP Bellevie, WA 98005 Company EHS-INTERNATIONAL, ME JOHN ST Sound Report To MIGUEL ORTEGA 008065 Sample ID OLAH Lab ID Blello Date 4/00 8:00 Time SAMPLE CHAIN OF CUSTOUT REMARKS Call Miguel Oxtega WHA Sample Type SALE LANG PROJECT NAME AND 8011 FOGRAL CENTER SOUTH 11-8400 DIANA M. PHELAN Nhan containers PRINT NAME  ${\mathcal D}$ TPH-Diesel Kar TPH-Gasoline ME 08/06/10 ANALYSES REQUESTED SVOCs by **82**70 HFS 3 4687 PAHS EHS1 APV JANO RCRA METALS O Will call with instructions O Best name samples Dispose affer 30 days □ Standard (2 Weeks) THE SECOND Bush charges entherized by: TOWN TOWN OR WANTED TVSCASSICITIANTVS 86/10 151

Notes

Samples received at 5

TIME

#### **ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D. Charlene Morrow, M.S. Yelena Aravkina, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

August 25, 2010

Miguel Ortega, Project Manager EHS International 13228 NE 20<sup>th</sup> St, Ste 100 Bellevue, WA 98005

Dear Mr. Ortega:

Included are the results from the testing of material submitted on August 16, 2010 from the Federal Center South 10048-11, F&BI 008177 project. There are 4 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA. INC.

Michael Erdahl Project Manager

Enclosures c: Diana Phelan EHS0825R.DOC

# FRIEDMAN & BRUYA, INC. ENVIRONMENTAL CHEMISTS

## **CASE NARRATIVE**

This case narrative encompasses samples received on August 16, 2010 by Friedman & Bruya, Inc. from the EHS International Federal Center South 10048-11, F&BI 008177 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	EHS International
008177-01	FCS-SB7-5
008177-02	FCS-SB8-5
008177-03	FCS-SB9-4.5
008177-04	FCS-SB10-4.5

All quality control requirements were acceptable.

## ENVIRONMENTAL CHEMISTS

Date of Report: 08/25/10 Date Received: 08/16/10

Project: Federal Center South 10048-11, F&BI 008177

Date Extracted: 08/23/10 Date Analyzed: 08/23/10

## RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C <sub>10</sub> -C <sub>25</sub> )	Motor Oil Range (C <sub>25</sub> -C <sub>36</sub> )	Surrogate (% Recovery) (Limit 50-150)
FCS-SB7-5 008177-01	<50	<250	84
FCS-SB8-5 008177-02	<50	<250	81
FCS-SB9-4.5 008177-03	<50	<250	82
FCS-SB10-4.5 008177-04	< 50	<250	81
Method Blank <sub>00-1303 MB</sub>	<50	<250	83

# FRIEDMAN & BRUYA, INC. ENVIRONMENTAL CHEMISTS

Date of Report: 08/25/10 Date Received: 08/16/10

Project: Federal Center South 10048-11, F&BI 008177

## QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 008239-03 (Matrix Spike)

			(Wet wt)	Percent	Percent		
	Reporting	Spike	Sample	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	Result	MS	MSD	Criteria	(Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	< 50	110	116	63-146	5

			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Diesel Extended	mg/kg (ppm)	5,000	106	79-144

#### **ENVIRONMENTAL CHEMISTS**

## **Data Qualifiers & Definitions**

- a The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- A1 More than one compound of similar molecule structure was identified with equal probability.
- b The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.
- c The presence of the analyte indicated may be due to carryover from previous sample injections.
- d The sample was diluted. Detection limits may be raised due to dilution.
- ds The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.
- dv Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.
- fb Analyte present in the blank and the sample.
- fc The compound is a common laboratory and field contaminant.
- hr The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.
- ht Analysis performed outside the method or client-specified holding time requirement.
- j The result is below normal reporting limits. The value reported is an estimate.
- $\boldsymbol{J}$  The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.
- jr The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- js The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- lc The presence of the compound indicated is likely due to laboratory contamination.
- L The reported concentration was generated from a library search.
- nm The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc The sample was received in a container not approved by the method. The value reported should be considered an estimate.
- $\mbox{pr}$  The sample was received with incorrect preservation. The value reported should be considered an estimate.
- $ve-Estimated\ concentration\ calculated\ for\ an\ analyte\ response\ above\ the\ valid\ instrument\ calibration\ range.\ A\ dilution\ is\ required\ to\ obtain\ an\ accurate\ quantification\ of\ the\ analyte.$
- vo The value reported fell outside the control limits established for this analyte.
- x The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

SAMPLE CHAIN OF CUSTODY

Send Report To | 1 1/2/EL ORTECIA

Company EHS -INTERNATIONAL INC

Address | 3328 NE 20th ST, #127

City, State, ZIP BELLEVUE, WA 7805

Phone # 425-455 295 Fax # 435-646-7347

REMARKS

10048-11	PROJECT NAME/NO.	SAMPLERS (signature) All
	PO#	

Page # of
TURNAROUND TIME
X.Standard (2-Weeks) SDA-YS
RUSH

SAMPLE DISPOSAL
X Dispose after 30 days
Return samples
Will call with instructions

Rush charges authorized by:

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FORMS\COC\COC.DOC

Fax (206) 283-5044

Ph. (206) 285-8282

Relinquished by:

Received by:

3012 16th Avenue West Seattle, WA 98119-2029

Received by:

PRINT NAME

EHS1

8/16/10

olfmils

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COMPANY

DATE

TIME

Friedman & Bruya, Inc.

### FRIEDMAN & BRUYA, INC.

### **ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D. Charlene Morrow, M.S. Yelena Aravkina, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

August 30, 2010

Miguel Ortega, Proejct Manager EHS International 13228 NE 20<sup>th</sup> St, Ste 100 Bellevue, WA 98005

Dear Mr. Ortega:

Included are the results from the testing of material submitted on August 25, 2010 from the Federal Center South 10048-10, F&BI 008288 project. There are 4 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA. INC.

Michael Erdahl Project Manager

Enclosures EHS0830R.DOC

# FRIEDMAN & BRUYA, INC. ENVIRONMENTAL CHEMISTS

## **CASE NARRATIVE**

This case narrative encompasses samples received on August 25, 2010 by Friedman & Bruya, Inc. from the EHS International Federal Center South 10048-10, F&BI 008288 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	EHS International
008288-01	FCS-TP7-6
008288-02	FCS-TP8-5
008288-03	FCS-TP8-6.5
008288-04	FCS-TP9-6.5

All quality control requirements were acceptable.

### FRIEDMAN & BRUYA, INC.

### **ENVIRONMENTAL CHEMISTS**

Date of Report: 08/30/10 Date Received: 08/25/10

Project: Federal Center South 10048-10, F&BI 008288

Date Extracted: 08/25/10 Date Analyzed: 08/26/10

## RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis Results Reported as mg/kg (ppm)

			Surrogate
Sample ID	<u>Diesel Range</u>	Motor Oil Range	(% Recovery)
Laboratory ID	$(C_{10}-C_{25})$	$(C_{25}-C_{36})$	(Limit 50-150)
FCS-TP7-6 008288-01	<50	<250	106
FCS-TP8-5 008288-02	100	<250	111
FCS-TP8-6.5 008288-03	5,800	350 x	118
FCS-TP9-6.5 008288-04	<50	<250	114
Method Blank <sub>00-1327 MB</sub>	< 50	<250	111

# FRIEDMAN & BRUYA, INC. ENVIRONMENTAL CHEMISTS

Date of Report: 08/30/10 Date Received: 08/25/10

Project: Federal Center South 10048-10, F&BI 008288

## QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 008288-04 (Matrix Spike)

			(Wet wt)	Percent	Percent		
	Reporting	Spike	Sample	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	Result	MS	MSD	Criteria	(Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	< 50	120	115	63-146	4

Laboratory Code: Laboratory Control Sample

			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Diesel Extended	mg/kg (ppm)	5,000	115	79-144

### FRIEDMAN & BRUYA, INC.

### **ENVIRONMENTAL CHEMISTS**

### **Data Qualifiers & Definitions**

- a The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- A1 More than one compound of similar molecule structure was identified with equal probability.
- b The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.
- c The presence of the analyte indicated may be due to carryover from previous sample injections.
- d The sample was diluted. Detection limits may be raised due to dilution.
- ds The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.
- dv Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.
- fb Analyte present in the blank and the sample.
- fc The compound is a common laboratory and field contaminant.
- hr The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.
- ht Analysis performed outside the method or client-specified holding time requirement.
- ip Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.
- j The result is below normal reporting limits. The value reported is an estimate.
- $\boldsymbol{J}$  The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.
- jr The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- js The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- lc The presence of the compound indicated is likely due to laboratory contamination.
- L The reported concentration was generated from a library search.
- nm The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc The sample was received in a container not approved by the method. The value reported should be considered an estimate.
- pr The sample was received with incorrect preservation. The value reported should be considered an estimate.
- $ve-Estimated\ concentration\ calculated\ for\ an\ analyte\ response\ above\ the\ valid\ instrument\ calibration\ range.\ A\ dilution\ is\ required\ to\ obtain\ an\ accurate\ quantification\ of\ the\ analyte.$
- vo The value reported fell outside the control limits established for this analyte.
- x The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

SAMPLE CHAIN OF CUSTODY ME 8/25/10

**D**6

Send Report To MIGUEL CRTEGA

Company EHS-INTERNATIONA INC.

Address 13238 NE 2049 St. #100

City, State, ZIP BELLEVUE, WA 98005

Phone # 425-455-255 Fax #425-1416-7247

SAMPLERS (signoring). And a project NAME/NO. PO#
FEDERALCENIER
SOUTH 10046-10

REMARKS OAK MIGGER WHEN

RESULTS ARE AVAILABLE

TURNAROUND TIME

☐ Standard (2 Weeks)

XRUSH 24 #65 TAT

Rush charges authorized by:

SAMPLE DISPOSAL X Dispose after 30 days

☐ Returm samples ☐ Will call with instruc

© Will call with instructions

														,		,
Fax (206) 283-5044	Ph. (206) 285-8282	Seattle, WA 98119-2029	3012 16th Avenue West	Friedman & Bruya, Inc.				anskrit			FS-TM-6.5	RS-TP8-6.5	FCS-TP8-5	FC5-TP7-6	Sample ID	
Received by:	Relinquished by:	Regeived by	Relinquished by:								99	03	02	G	Lab ID	
ł by:	shed by:	700	shed by:	SKG1	,						<u></u>			8/25/10	Date Sampled	
		がただれ	h.And	SIGNATURE							12100	11:10	11:00	ho 10:35	Time Sampled	
		Je Je	M.	5							118	Sil	Seil	SOIL	Sample Type	
		1 Uas	DIANA M.	P						į	/	_	/	/	# of containers	
			7,	RIN							$\times$	$\times$	$\times$	$\times$	TPH-Diesel	
	(	L	1.7	PRINT NAME			ļ								TPH-Gasoline	
		1.15	14	AME			-	ļ							BTEX by 8021B	
	,	アグ	to				-	<u> </u>						-	VOCs by 8260	A
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		125/11	125/10	DATE			•								Notes	
		1.60.1	13:09	TIME											tes	

FORMS\COC\COC.DOC

Samples received at 12

		EUC International
		EHS - International
APPENDIX B:	CONTAMINATED SOIL DISPOSAL WE MANIFESTS	IGHT TAGS AND



EHSI-10-1236 East Marginal Way

Parking lot

DATE: August 3, 2010

	,,,	_		58.32					93 08										_>	_>	
	TONNAGE	SLIPS	30.68	27.64 58.32	24 14		27.77	32.62	33 59 93 98										152.30	24.14	
	TYPE OF	MATERIALS	Class 3 Soil	Class 3 Soil	Asphalt		Class 3 Soil	Class 3 Soil	Class 3 Soil										Total Tons	Total Tons	
		DATE	8/3/2010	8/3/2010	8/3/2010		8/3/2010	8/3/2010	8/3/2010										Class 3 Soil Total Tons	Asphalt	
	LOCATION		Cemex	Сетех	United Recyclina	2	Сетех	Cemex	Cemex												
•	ESTIMATED	QUANTITY	30.68 ton	27.64 ton	24.14 ton		27.77 ton	32.62 ton	33.59 ton					i							
•	DUMP	TIME	8:41 AM	11:20 AM	2:46 PM		8:38 AM	11:12 AM	2:17 PM												
	MANIFEST	*	1136/1876048686√	1136/1876048695	1136/97870		2807/1876048685	2807/1876048694	2807/1876048705								:				
_	TRUCKING	COMPANY	Wyser Construction	2 Wyser Construction	3 Wyser Construction		5 L & L Transport √	6 L & L Transport	7 L & L Transport												
	LOAD	Š.	<b>—</b>	2	3	4	5	9	7	∞	6	10	11	12	13	14	15	16	17	18	19

### UNITED RECYCLING CO.

18827 YEW WAY \* SNOHOMISH, WA 98296 OFFICE: 425-485-0355 FAX: 360-668-9252

### CHARGE TICKET

DATE:

8/3/10

I / WE, THE UNDERSIGNED, CERTIFY THAT THE PRODUCT DELIVERED FOR DISPOSAL IS NON-HAZARDOUS RECYCLABLE MATERIAL

TIME IN:

2:46PM

TICKET #:97870

ACCT #:

2053-001 WYSER CONSTRUCTION INC

TRUCK#:

WY30T

PO#/JOB#: EHSI/10/1236

NOTES:

PRODUCT: CL ASPHALT

Yards:

0

Gross :

90,600 lbs

Tare:

42,320

Net Wt:

lbs 48,280 lbs

Tons:

24.14

**AUTHORIZED SIGNATURE** 



Weighed At: Soil Remediation

6300 Glenwood Ave Everett, WA 98213

Location: 1876

40808314 Order:

Dispatch:

0.00Date: 08/03/2010

Ship To: 3031899-WYSER CONSTRUCTION INC

76:GSA EAST MARGINAL WAY 76:GSA EAST MARGINAL WAY

EVERETT, WA 98:213

Instruct:

EHSL-10-1236 Job#:

PO: DAN REYNOLDS

Product: 1192508 - CLASS 3 SOIL DUMPED BY TON

Carrier:

Vehicle: 2146258-VVC30T.WYSER CONSTRUCTION

Tractor / Trailer1 / Trailer 2: -/- -/-

30.68 ton Qty: --- DRIVER ON AT TARE & GROSS ---Weighmaster: lb ton tne CEMEX Gross: 104,080 52.04 47.21 Deputy Weighmaster: Tare: 42,720 21 36 19.38 Malia J. Leake 61,360 30.68 Net: 27.83 \* Predetermined Tare

Scale:

in:

Out:

12:00 am

Today Loads:

Today Qty: 58.45 ton

CEMEX'S STANDARD TERMS: AND CONDITIONS IN CORPORATED HEF.EIN.

8:41 am

Signature of Receiving Agent

Driver:

2

METRIC CONVERSION FORMULA: PIDENES LOYERSE BY 2204 623, POUNCISE TO 2 DELIMALS SEE FEVERSE SIDE FOR PRODUCT LABEL INFORMATION



1876048685

Weighed At: Soil Remediation

6300 Glenwood Ave Everett, WA 98213

40808314

Location: 1876 0.00Date: 08/03/2010

Dispatch: Ship To: 3031899-WYSER CONSTRUCTION INC

76:GSA EAST MARGINAL WAY 76:GSA EAST MARGINAL WAY

**EVERETT, WA 98213** 

Instruct:

EHSL-10-1236

PO: DAN REYNOLDS

Product: 1192508 - CLASS 3 SOIL DUMPED BY TON

Carrier: -

Vehicle: 2034258-LL3T,L&LTRANSPORT Tractor / Trailer1 / Trailer 2: -/- 5 -/-

Qty:	27.77 ton	DRIVE	R ON AT 1	ARE& G	ROSS
Weighm	iaster:		lb	ton	tne
CEMEX		Gross:	91,660	45.83	41.58
	Weighmaster:	Tare:	36,120	18.06	16.38
Malia J. L	.eake	Net:	55,540	27 77	25.19
Scale:	1	* 5	redetern	nined Tare	Ð
in:	12:00 am	Today L	oads:		1
Out:	3:38 am	Today Q	tv:	2	7.77 ton:

Today Qty:

CEMEX'S STANDARD TERMS AND CONDITIONS IN CORPORATED HEREIN.

Signature of Receiving Agent

Product: 9

EHSL-10-1236

1192508 - CLASS 3 SOIL DUMPED BY TON

DAN REYNCLDS

Instruct

76:GSA EAST MARGINAL WAY

0.00Date:

08/03/2010

ocation: 1876

ERETT, WA 98213

Tractor / Trailer1 / Trailer 2:

/ahicle:

2146258 - WC30T MYSER CONSTRUCTION

Driver:

27.77 ton

METRIC CONVERSION FORMULA: POUNDS DIM DED BY 2204 623, ROUNDED TO 2 DECIMALS SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION

METRIC CONVERSION FORMULA: POLITIES OF DECIE STAZA 623, POUTRIED TO 2 DECIMALS SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION CEMEX'S STANDARD TERMS AND lignature of Receiving Agent

Driver

CHMEX Scale: Weighmaster: Malia J. Leake Deputy Weighmaster 1:20 am 27.64 ton 2:00 am Ssoli Today City: Trivay Loads: DRIVER ON AT Predetermined 55,280 98,000 TARE & 27 64 21.36 49 00 5 118.71 ton GROSS 44.45 2 8 38

Ship To: 3C31899-WYSER CONSTRUCTION INC Order: Everett, WA 98213 6300 Glenwood Ave Weighed At: Soil Remediation 76:GSA EAST MARGINAL WAY 408083/4 XWEUU Dispatch:



Weighed At. Soil Remediation

6300 Glenwood Ave

Everett, WA 98213

08/03/2010 0.00Date: Ship To: 3C31899-WYSER CONSTRUCTION INC Dispetch: Order: 4C808314

76:GSA EAST MARGINAL WAY EVERETT, WA 98213 76:GSA EAST MARGINAL WAY

Instruct

DAN REYNOLDS Product: 1192508 - CLASS 3 SOIL DUMPED BY TON EHSL-12-1236 Job#:

Carrier:

Vehicle: 2034258-LL3T,L&LTRANSPORT

Tractor/Trailer1/Trailer 2: -4-5-4-

Š	33,59 ton	DRIVE	DRIVER ON AT TARE & GROSS	ARE & GF	SOSS
Welghmaster:	naster;		2	ţ	the
CEMEX		Gross:	103,300	51.65	46.86
Deputy	Deputy Weighmaster:	Tare:	36,120	18.06	16.38
Malla J. Leake	eake	Net	67,180	33.59	30.47
Scale:	•	*	* Predetermined Tare	ined Tare	•
<u>:</u>	. 2:00 am	Today Loads:	oads:		ß
Out:	2:17 om	Today City:	<u>;</u>	15	152.30 ton

CEMEX'S STANDARD TERMS AND CONDITIONS IN CORPORATED HISREIN.

Driver METRIC CONVERSION FORMULA: POUNDS DIVIDED BY 220'S 523, ROUNDED TO 2 DESTINALS SEE FEVER'SE SIDE FOR PRODUCT LABEL INFORMATION Signature of Receiving Agent

# 

# 1876048694

Weighed At: Soil Remediation

6300 Glenwood Ave Everett, VVA 98213

Location: 1876

Location: 1876 08/03/2010

0.00Date: Ship To: 3C31899-WYSER CONSTRUCTION INC Dispatch: Order: 4C808314

76:GSA EAST MARGINAL WAY 76:GSA EAST MARGINAL WAY

EVERETT, WA 98213

Instruct:

PO: DANREYNCLDS Product: 1192508 - CLASS 3 SOIL PUMPED BY TON EHSL-12-1236 Job#:

Carrier:

Vehicle: 2034258-LL3T,L8LTRANSPORT Tractor / Truller1 / Trailer 2: -/- 5-/-

45.98 16.38 29.59 91.07 ton -- DRIVER ON AT TARE: & GROSS ---\* Fredetermined Tare 50.68 32.62 18.06 36,120 101,380 65,240 Today Loads: Today City: Gross: Tare: Net Deputy Weighmaster: 32,62 ton , 2:00 am 1:12 am Welghmaster: Malia J. Leake CEMEX Scale: Ö. OUT:

CEMEX'S STANDARD TERMS AND CONDITIONS IN CORPORATED HEREIN.

METRIC CONVERSION FORMULA: POUNDS IN THEE PY 2204 6.2; POUNDET TO LIDETIMALS SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION Signature of Receiving Agent



EHSI-10-1236 East Marginal Way

Parking lot

DATE: August 4, 2010

LOAD	TRUCKING	MANIFEST	DUMP	ESTIMATED	LOCATION		TYPE OF	TONNAGE
O	COMPANY	#	TIME	QUANTITY		DATE	MATERIALS	SLIPS
-	1 L & L Transport √	2808/1876048711	8:25 AM	28.74 ton	Cemex	8/4/2010	Clace 3 Soil	72 87
2	2 L & L Transport	2808/1876048722	11:02 AM		Cemex	8/4/2010		28.75
(L)	3 L & L Transport	2808/1876048739	2:35 PM	1	Cemex	8/4/2010		28.75
4							L	
5								
9								
2			1					
80								
6								
10								
11								
12								
13								
14								
15								
16			į					
17						Class 3 Soil	Class 3 Soil Total Tons	86.24
18								
19								



Weighed At: Soil Remediation

6300 Glenwood Ave Everett, WA 98213

40808314

Dispatch:

Location: 1876 0.00Date: 08/04/2010

Ship To: 3031899-WYSER CONSTRUCTION INC

76:GSA EAST MARGINAL WAY 76:GSA EAST MARGINAL WAY

EVERETT, WA 98213

Instruct: L8 L3T

Job#: EHSL 10 1236

PO: DAN REYNOLDS

Product: 1192508 - CLASS 3 SOIL DUMPED BY TON

Carrier:

Vehicle: 2034258-LL3T,L&LTRANSPORT Tractor / Trailer1 / Trailer 2: -/- 5 -/-

Qtv: 28.75 ton -- DRIVER ON AT TARE & GROSS ---Weighmaster: lb ton tne CEMEX Gross: 93.620 46 81 42.47 Deputy Weighmaster: Tare: 36,120 18 06 16.38 Elizabeth M. Arnold Net: 57,500 28.75 26.08 Scale: 1 Manual Weight

In:

Out:

10:49 am 1:02 am

Today Loads:

**Today Qty:** 

2 57.49 ton

CEMEX'S STANDARD TERMS AND CONDITIONS IN CORPORATED HEREIN.

Signature of Receiving Agent

Driver:

Scale:

METRIC CONVERSION FORMULA, PROVIDES DIVIDED BY 22 M 623, FORMULEUTO 2 DECIMALS SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION



1876048711

Weighed At: Soil Remediation

6300 Glenwood Ave

Everett, WA 98213

Dispatch:

Location: 1876 0.00Date: 08/04/2010

40808314

Ship To: 3031899-WYSER CONSTRUCTION INC

76:GSA EAST MARGINAL WAY 76:GSA EAST MARGINAL WAY

EVERETT, WA 98213

Instruct: L8 L3T

EHSL 10 1236 Job#:

PO: DAN REYNCLDS

Product: 1192508 - CLASS 3 SOIL DUMPED BY TON

Carrier:

Vehicle: 2034258-LL3T,L&LTRANSPORT Tractor / Trailer1 / Trailer 2: -/- 5 -/-

Qty:	28.74 ton	ARE & G	ARE & GROSS					
Weighn	naster:		lb	ton	tne			
CEMEX		Gross:	93,600	46.80	42.46			
Deputy	Weighmaster:	Tare:	36,120	18 06	16.38			
Elizabeth	n M. Arnold	Net:	28.74	26.07				
Scale:	1	*	:   57,480   28,74   2 * Predetermined Tare					
In:	12:00 am	Today L		1				
Out:	8:25 am	Today Q	2	28.74 ton				

CEMEX'S STANDARD TERMS AND CONDITIONS IN CORPORATED HEREIN.

Signature of Receiving Agent

Vehicle:

2034258 - LL3T, L&LTRANSPORT

Product:

EHSL 10

1192508 - CLASS 3 SOIL DUMPED BY TON

DANKEYNCLDS

Driver:

METRIC CONVERSION FORMULA: POUNCE DIVIDED BY 2234-523 POUNDED TO 2 DECIMALS SEE FEVERSE SIDE FOR PRODUCT LABEL INFORMATION

METRIC CONVERSION FORMULA: CONC. DO CALL EC 2214 823, ROUNDED TO 2 CEL SEE FEVER SE SIDE FOR PRODUCT LABEL INFORMATION Signature of Receiving Agent CEMEX'S STANDARD TERMS AND CONDITIONS IN CORPCINATED HEREIN

1

Elizabeth M. Arnold Deputy Weighmaster Weighmaster: Tractor / Trailer1 / Trailer 2: 28.75 2:36 . 2:00 am mc Ön 101 Net: Today Ony: Today Loads: Tare: SS0.15 -- DRIVER ON AT Predetermined 57,500 93,620 36,120 ᡖ TARE & GROSS 18.06 46 81 S 28 Tare 75 36.24 42.47 듦 26.08 16.38 헣 co

Instruct L8 L3T EVERETT, WA 98213

Order: Order: 4C808314 Dispatch: 0.0
Ship To: 3C31899-WYSER CONSTRUCTION INC 40808314 76:GSA EAST MARGINAL WAY 76:GSA EAST MARGINAL WAY

0.00Date:

08/04/2010

Location: 1876

Everett, V/A 98213 6300 Glenwood Ave Weighed At: Soil Remediation



EHSI-10-1236 East Marginal Way

Parking lot

DATE: August 5, 2010

			_				-
<u>ဗ</u> ု	MANIFEST #		ESTIMATED	LOCATION	LE V	TYPE OF	TONNAGE
LANGLIAN	*		COANIE		DAIE	MAIERIALS	SLIPS
L & L Transport √	2809/1876048742	8:41 AM		Cemex	8/5/2010	Class 3 Soil	30.67
2 L & L Transport	2809/1876048747	11:44 AM		Cernex	8/5/2010		32.14
- & L Transport	2809/1876048751	2:36 PM	[	Cemex	8/5/2010	L	32.66
		1				L	
				_			
		i					
					Class 3 Soil	Class 3 Soil Total Tons	95.47



Weighed At: Soil Remediation

6300 Glenwood Ave Everett, WA 98213

Location: 1876 08/05/2010

40808314

Dispatch: Ship To: 3031899-WYSER CONSTRUCTION INC

0.00Date:

76:GSA EAST MARGINAL WAY

76:GSA EAST MARGINAL WAY

EVERETT, WA 98213

Instruct:

Job#: PO: DAN REYNOLDS

Product: 1192508 - CLASS 3 SOIL DUMPED BY TON

Carrier:

Vehicle: 2034258-LL3T,L&LTRANSPORT Tractor / Trailer1 / Trailer 2: -/- 5 -/

Qty:	32.14 ton	DRIVE	DRIVER ON AT TARE & GROSS								
Weighm	iaster:		lb	ton	tne						
CEMEX		Gross;	100,400	50 20	45.54						
Deputy	Weighmaster:	Tare:	36,120	18 06	16.38						
Elizabeth	M. Arnold	Net:	64,280	32 14	29.16						
Scale:	1	**	* Predeterminer								
In:	12:00 am	Today L		2							
Out:	1:44 am	Today C	Today Qty:								

CEMEX'S STANDARD TERMS AND CONDITIONS IN CORPORATED HEREIN.

Signature of Receiving Agent

Š.

Tractor / Trailer1 / Trailer 2:

151

Vehicle: 2034258-LL3T,L&LTRANSPORT

Product: 1192508 - CLASS 3 SOIL DUMPED BY TON

DAN REYNCLDS

Carrier

Scale:

METRIC CONVERSION FORMULA: POUNDS 557-1951 EV 22/4-6221 POUNDED TO 2 DB - MALS SEE REVERSE SIDE FOR PRODUCT LABGE INFORMATION

METRIC CONVERSION FORMULA: POLNIDS IN LEGIT TO AMERICAN FORM ATTON SEE REVERSE SIDE FOR ART DUCT LABEL INFORMATION

STAFA STA

Driver

Signature of Receiving Agent



1876048742

Weighed At: Soil-Remediation

6300 Glerhwood Ave-Everett, WA 98213

40808314 Dispatch:

Location: 1876 0.00Date: 08/05/2010

Ship To: 3031899 - WYSER CONSTRUCTION INC

76:GSA EAST MARGINAL WAY 76:GSA EAST MARGINAL WAY

EVERETT, WA 98213

Instruct:

Job#:

PO: DAN REYNOLDS

Product: 1192508 - CLASS 3 SOIL DUMPED BY TON

Carrier: -

Vehicle: 2034258-LL3T,L&LTRANSPORT Tractor / Trailer1 / Trailer 2: -/- 5 -/-

DRIVE	FARE& GE	RE& GROSS				
	1b	ton	tne			
Gross:	97,460	48.73	44.21			
īare:	36,120	18.06	16.38			
Net:	30 67	27.82				
*	Predetern	nined Tar	e			
Today L		. 1				
Today C	3	30.67 ton				
	Gross: Tare: Net: *  Today L	Gross: 97,460 Tare: 36,120 Net: 61,340	Gross: 97,460 48.73 Fare: 36,120 18.06 Net: 61,340 30.67 * Predetermined Tan Today Loads:			

CEMEX'S STANDARD TERMS AND CONDITIONS IN CORPORATED HIEREIN

Instruct

**EVERETT, WA.98213** 

Signature of Receiving Agent

Driver:

METRIC CONVERSION FORMULA: POUNDING DIVILIED BY 2204 623, ROUGEDED TO 2 DEFINALS SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION

CEMEX'S STANDARD TERMS AND CONDITIONS IN CORPORATED HEREIN

Weighmaster: Elizabeth M. Arnold Deputy Weighmaster :2.65 . 2:00 anı 2:36 om ġ Tare Today Qty: Today Loads: Shous - DRIVER ON AT TARE & GROSS ---Predetermined Tare 65,320 01,44 36,120 5 18.06 50.72 32 66 95.47 ton 46.01 16.38 Ħe

Order: 40808314 Dispatel: 0.0 Ship To: 3031899-WYSER CONSTPUCTION INC Everett WA 98213 6300 Glenwood Ave Weighed At Soil-Remediation 76:GSA EAST MARGINAL WAY 76:GSA EAST MARGINAL WAY X U E U

0.00pate:

08/05/2010

..ocation: 1876



EHSI-10-1236 East Marginal Way

Parking lot

DATE: August 6, 2010

TYPE OF TC  E MATERIALS SI  10 Class 3 Soil	Aspliant 1000 1000
DUMP         ESTIMATED         LOCATION         TY           TIME         QUANTITY         DATE         M/L           8:29 AM         33.64 ton         Cemex         8/6/2010           10:48 AM         29.45 ton         Cemex         8/6/2010           2:05 PM         33.99 ton         Cemex         8/6/2010           10:40 AM         33.97 ton         Cemex         8/6/2010           12:40 PM         32.91 ton         Cemex         8/6/2010           2:53 PM         29.82 ton         Cemex         8/6/2010           2:53 PM         29.82 ton         Cemex         8/6/2010           Class 3 Soii To         Class 3 Soii To	T
DUMP         ESTIMATED         LOCATION           TIME         QUANTITY           8:29 AM         33.64 ton         Cemex           10:48 AM         29.45 ton         Cemex           10:48 AM         33.99 ton         United Recycling           8:18 AM         33.17 ton         Cemex           10:40 AM         33.97 ton         Cemex           12:40 PM         32.91 ton         Cemex           2:53 PM         29.82 ton         Cemex           2:53 PM         29.82 ton         Cemex	7
DUMP ESTIMATED TIME QUANTITY 8:29 AM 33.64 ton 10:48 AM 29.45 ton 2:05 PM 33.99 ton 10:40 AM 33.97 ton 12:40 PM 32.91 ton 2:53 PM 29.82 ton 2:53 PM 29.82 ton	2
DUMP TIME 8:29 AM 10:48 AM 10:40 AM 12:40 PM 12:40 PM 2:53 PM	
DUMP TIME 8:29 AM 10:48 AM 10:40 AM 12:40 PM 12:40 PM 2:53 PM	
######################################	
1140/ 1140/ 1140/ 1140/ 2810/ 2810/ 2810/ 2810/	
TRUCKING COMPANY  COMPANY  Wyser Construction Wyse	
LOAD NO. 2 2 3 3 4 4 4 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1	5 6

### UNITED RECYCLING CO.

18827 YEW WAY \* SNOHOMISH, WA 98296 OFFICE: 425-485-0355 FAX: 360-668-9252

### CHARGE TICKET

DATE:

8/6/10

I / WE, THE UNDERSIGNED, CERTIFY THAT THE PRODUCT DELIVERED FOR DISPOSAL IS NON-HAZARDOUS RECYCLABLE MATERIAL

TIME IN:

2:05PM

TICKET #:98115

ACCT #:

2053-001 WYSER CONSTRUCTION INC

PRODUCT: CL ASPHALT

TRUCK#: WY30

PO#/JOB#: EHSI-10-1236

NOTES:

Yards: 0

Gross #

94,880

lbs

Tare: Net Wt 26,900

67,980

Tons:

33.99

**AUTHORIZED SIGNATURE** 



Weighed At: Soil Remediation

6300 Glenwood Ave Everett, WA 98213

Location: 1876

Order:

40808314 Dispatch:

Ship To: 3031899-WYSER CONSTRUCTION INC

0.00Date: 08/06/2010

76:GSA EAST MARGINAL WAY

76:GSA EAST MARGINAL WAY

EVERETT, WA 98213

Instruct:

Job#:

PO: DAN REYNOLDS

Product: 1192508 - CLASS 3 SOIL DUMPED BY TON

Carrier:

Vehicle: 2146258~WC30T.WYSER CONSTRUCTION

Tractor / Trailer1 / Trailer 2: -/- -/-

29.45 ton Qty: --- DRIVER ON AT TARE & GROSS ---Weighmaster: lb ton tne CEMEX Gross: 101,620 50.81 46.09 Deputy Weighmaster: Tare: 42,720 21.36 19.38 Elizabeth M. Amold 58,900 29.45 26.72 Scale: 1 \* Predetermined Tare

12:00 am In: Out:

10:48 am

Today Loads: Today Qty:

130.23 ton

CEMEX'S STANDARD TERMS AND CONDITIONS IN CORPORATED HEREIN.

Signature of Receiving Agent

Driver:

Š

Tractor / Trailer1 / Trailer 2:

1.51

Vehicle: Carrier:

2034258-LL3T,L&LTRANSPORT

4

METRIC CONVERSION FORMULA: POLINDS BIVIDED, BIC 2204 623, POUNDED TO 2 DECIMALS SEE FEVERSE SIDE FOR PRODUCT LABEL INFORMATION



1876048754

Weighed At; Soil Remediation

6300 Glenwood Ave

Everett, WA 98213

40808314

Dispatch:

Location: 1876 0.00Date: 08/06/2010

Ship To: 3031899-WYSER CONSTRUCTION INC

76:GSA EAST MARGINAL WAY 76:GSA EAST MARGINAL WAY

**EVERETT, WA 98213** 

instruct;

Job#:

PO: DANREYNOLDS

Product: 1192508 - CLASS 3 SOIL DUMPED BY TON

Carrier:

Vehicle: 2146258 - WC30T, WYSER CONSTRUCTION

Tractor / Trailer1 / Trailer 2: -/- -/-

Qty: 33.64 ton --- DRIVER ON AT TARE & GROSS ---Weighmaster: lb ton tne CEMEX 110,000 Gross: 55.00 49.90 Deputy Weighmaster: Taire: 42,720 21.36 19.38 Elizabeth M. Amold 67,280 Net: 33.64 30.52 Scale: \* Predetermined Tare 12:00 am In: **Foday Loads:** 2 Out: 8:29 am

Today Oty:

CEMEX'S STANDARD TERMS AND CONDITIONS IN CORPORATED HEREIN.

Instruct

EN/ERETT, W/A 98/21/3

76:GSA EAST MARGINAL WAY 76:GSA EAST MARGINAL WAY

Signature of Receiving Agent

Product: 1192508 - CLASS 3 SOIL DUMPED BY TON

DAN REYNOLDS

Driver:

66.81 ton

METRIC CONVERSION FORMULA: POLINGE DIM DECIBY 22/14 GR., POLINGER TO 2 DECIMALS SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION

inip To:

4C808314 Dispetch: 0.1 3C31899 - VVYSER CONSTRUCTION INC

0.00Date:

08/06/2010

ocation: 1876

4, WA 98213

4C808314

CEMEX'S STANDARD TERMS AND CONDITIONS IN CORPCIRATED HEREIN.

Scale: CEMEX Deputy Weighmaster: Weighmaster: Elizabeth ≤ 33 17 3:18 ' 2:00 anı Amolo 털 Vet: Gross Tare foday Qty: Today Loads: DRIVER ON AT TARE & GROSS Predetermined 66,340 102,460 36,120 5 33 17 18.06 Ω 23 33.17 ton 46.48 16.38 Ħe .0

6300 Glenwood Ave Weighed At: Soil Remediation NEW X

CONVERSION FORMULA: POUNDS DIVIDED BY 2204 823, POUNDED TO 2 DECIMALS SEE REVERSE SIDE FOR PRODUCT LABEL INFORNATION

Signature of Receiving Agent

Driver:



Weighed At: Soil Remediation

6300 Glenwood Ave

t, WA 98213 Order:

40808314 Dispatch:

Location: 1876 0.00Date: 08/06/2010

Ship To: 3031899-WYSER CONSTRUCTION INC

76:GSA EAST MARGINAL WAY 76:GSA EAST MARGINAL WAY

EVERETT, WA 98213

instruct:

Job#:

PO: DAN REYNOLDS

Product: 1192508 - CLASS 3 SOIL DUMPED BY TON

Carrier:

Vehicle: 2034258-LL3T,L&LTRANSPORT

Tractor / Trailer1 / Trailer 2: -/- 5 -/-

32.91 ton Qly: Weighmaster: CEMEX

Deputy Weighmaster: Elizabeth M. Arnold

Scale: in:

Out:

12:00 am

12:40 pm

\* Predetermined Tare **Today Loads:** 

GIOSS:

Tare:

Net:

**Today Qty:** 163.14 ton

--- DRIVER ON AT TARE & GROSS ---

ton

50.97

18.06

32.91

lb

101,940

36,120

65,820

CEMEX'S STANDARD TERMS AND CONDITIONS IN CORPORATED HEREIN.

Sie ire of Receiving Agent

Driver:

CHMEX

Scale:

Ξ

46.24

16.38

29.86

5

CONVERSION FORMULA: POUNDS DIVIDED BY 2204 623, ROUNDED TO 2 DECIMALS SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION M



1876048757

Weighed Att Soil Remediation

6300 Glenwood Ave

t, WA 98213 Orger:

4C808314 Dispatch:

Location: 1878 0.00Date: 08/06/2010

Ship To: 3031899-WYSER CONSTRUCTION INC

76:GSA EAST MARGINAL WAY 76:GSA EAST MARGINAL WAY

EVERETT, WA 98213

Instruct:

Job#:

PO: DAN REYNOLDS

Product: 1192508 - CLASS 3 SOIL DUMPED BY TON

Carrier:

Vehicle: 203/4258-LL3T,L&LTRANSPORT Tractor / Trailer 1 / Trailer 2: -/- 5 -/-

33.97 ton Qty: -- DRIVER ON AT TARE & GROSS ---Weighmaster: lb tne CEMEX Gross: 104,060 52.03 47.20 Deputy Weighmaster. Tare: 36,120 18.06 16.38 Elizabeth M. Arnold 67,940 Net-33.97 30.82

Scale: \* Predetermined Tare 2:00 am in:

Today Loads: 3 Out: 10:40 am Today Qty: 100.78 ton

CEMEX'S STANDARD TERMS AND CONDITIONS IN CORPORATED HEFEIN.

Signature of Receiving Agent

Job#:

Carrier Product:

Vehicle:

2034258-LL3T,L&LTRANSPORT

1.51

1192508 - CLASS 3 SOIL DUMPED BY TON

ö

DAN REYNCLDS

Instruct

EVERETT, WA 98213

Driver:

CONVERSION FORMULA: POUNDS DIVIDED BY 2204 \$23, ROUNDED TO 2 DELIMALS SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION

Order:

4C808314

Ship Ta:

3C31899-WYSER CONSTRUCTION INC

Dispatch:

0.00Date:

08/06/2010

ocation: 1876

76:GSA EAST MARGINAL WAY 76:GSA EAST MARGINAL WAY

Everett, WA 98213

METRIC CONVERSION FORMULA: POUNDS DIVIDED BY 2204 322, ROUNCED TO 2 DELIMALS SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION Signature of Receiving Agent CEMEX'S STANDARD TERMS AND CONDITIONS IN CORPORATED HEREIN

Driver

Elizabeth M. Arnold Deputy Weighmaster Tractor / Trailer1 / Trailer 2: Weighmaster: 29.82 ton 2:53 2:00 an nc Zet: Today City Today Loads: Tare Gross DRIVER Predatermined 59,640 95,760 ON AT TARE & 36,120 ㅠ 47.88 18.06 29 Tare 82 GROSS 192.96 43.44 16.38 ine. 27.05 ğ l 0

Sienwood Ave 

At: Soil Remediation



EHSI-10-1236 Eas

East Marginal Way

Parking lot

DA⊺E: August 16, 2010

					85.22	26.40	2				106.06										
TONNAGE	SLIPS		26.33	28.95	29.94 85.22	26 40 26 40		19.36	26.91	29.99	29.80 106.06								191.28	26.40	
TYPE OF	MATERIALS	:	Class 3 Soil	Class 3 Soil	Class 3 Soil	Asphalt		Class 3 Soil	Class 3 Soil	Class 3 Soil	Class 3 Soil								Total Tons	Total Tons	
	D,ATE	0.000	8/16/2010	8/16/2010	8/16/2010	8/16/2010		8/16/2010	8/16/2010	8/16/2010	8/16/2010								Class 3 Soil	Asphait	
LOCATION			Cemex	Cemex	Cemex	United Recycling		Cemex	Cemex	Cemex	Cemex										
ESTIMATED	QUANTITY			28.95 ton	29.94 ton	26.40 ton		19.36 ton	26.91 ton	29.99 ton	29.80 ton										
DUMP	TIME	0.40 044	8.43 AIM	10:53 AM	1:08 PM	4:24 PM		8:28 AM	10:43 AM	12:58 PM	3:25 PM										
MANIFEST	*	4446/4076040704	1140/16/0046/94	1146/1876048796	1146/1876048798	1146/98724		2815/1876048793	2815/1876048795	2815/1876048797	2815/1876048799										
TRUCKING	COMPANY	White Condition	wyser construction	2 Wyser Construction	3 Wyser Construction	4 Wyser Construction		6 L & L Transport	7 L & L Transport	8 L & L Transport	9 L & L Transport										
LOAD	0	*		2	3	4	9	9	7	80	6	10	11	12	13	14	15	16	17	18	19

### UNITED RECYCLING CO.

18827 YEW WAY \* SNOHOMISH, WA 98296 OFFICE: 425-485-0355 FAX: 360-668-9252

## CHARGE TICKET

DATE:

8/16/10

I/WE, THE UNDERSIGNED, CERTIFY THAT THE PRODUCT DELIVERED FOR DISPOSAL IS NON-HAZARDOUS RECYCLABLE MATERIAL

TIME IN:

4:24PM

TICKET #:98724

ACCT#:

2053-001 WYSER CONSTRUCTION INC

PRODUCT: CL ASPHALT

TRUCK#: WY30T

PO#/JOB#: EHSI 10-1236

NOTES:

Yards: 0

Gross:

95,120

lbs

Tare:

42,320

lbs

Net Wt :

52,800

lbs

Tons:

26.40

**AUTHORIZED SIGNATURE** 



Weighed At: Soil Remediation

6300 Glenwood Ave Everett, WA 98213

Location: 1876

40808314 Order:

Dispatch:

0.00Date: C8/16/2010

Ship To: 3031899-WYSER CONSTRUCTION INC 76:GSA EAST MARGINAL WAY

76:GSA EAST MARGINAL WAY

EVERETT, WA 98213

Instruct:

Job#: PO: DAN REYNOLDS

Product: 1192508 - CLASS 3 SOIL DUMPED BY TON

Carrier: -

Out:

Vehicle: 2146258-VVC30T.WYSER CONSTRUCTION

Tractor / Trailer 1 / Trailer 2: -/- -/-

Qty: 28.95 ton --- DRIVER ON AT TARE & GROSS ---Weighmaster: lb ton tne CEMEX 100,620 Gross: 50.31 45.64 Deputy Weighmaster: 42,720 Tare: 21.36 19.38 Malia J. Leake 57,900. 28.95 26.26 Scale: Predetermined Tare In:

Today Loads:

Today Qty: 101.55 ton

CEMEX'S STANDARD TERMS AND CONDITIONS IN CORFORATED HEREIN.

10:53 am

Signature of Receiving Agent

Driver:

METRIC CONVERSION FORMULA: PIOLINE'S 5/1V DEC. BY 2204-623, POUNDED TO 2 DECIMALS SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION



1876048794

Weighed At: Soil Flemediation

6300 Glenwood Ave Everett, WA 98213

Location: 1876

Order: 40808314

Dispatch:

0.00Date: C8/16/2010

Ship To: 3031899-WYSER CONSTRUCTION INC

76:GSA EAST MARGINAL WAY 76:GSA EAST MARGINAL WAY

EVERETT, WA 98213

Instruct:

Job#: PO: DAN REYNOLDS

Product: 1192508 - CLASS 3 SOIL DUMF ED BY TOUR

Carrier: -

In:

Out:

Vehicle: 2146258-WC30T.WYSER CONSTRUCTION

Vehicle: 2146258 - WC30T WYSER CONSTRUCTION

Tractor / Trailer 1 / Trailer 2: -/- -/-

26.33 ton --- DRIVER ON AT TARE & GROSS ---Qty: Weighmaster: lb ton tne **CEMEX** 95,380 Gross: 47.69 43.26 Deputy Weighmaster: 42,720 21 36 Taire: 19.38 Malia J. Leake Net: 52.660 26.33 23.89 Scale: Predetermined Tare

Today Qty:

8:43 am

Today Loads:

2 45.69 ton

CEMEX'S STANDARD TERMS AND

CONDITIONS IN CORPORATED HEREIN.

Signature of Receiving Agent

Product:

1192508 - CLASS 3 SOIL DUMPED BY TON

DAN REYNCLOS

Driver:

METRIC CONVERSION FORMULA: PULLIDS DIVIDED BY 2204-023, ROUPDED TO 2 DELIMALS SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION

CEMEX'S STANDARD TERMS AND CONDITIONS IN CORPORATED HISTEIN Signature of Receiving Agent

METRIC CONVERSION FORMULA: POUNDS COVIDED BY 2204-823, POUNDED TO 2 DELIMALS SEE: REVERSE SIDE FOR PRODUCT LABEL INFORMATION

Driver

Scale Deputy Weighmaster: Malia J. Leake 1:08 ä Today City: Today Loads:

151.48

헣 တ

Tractor / Trailer1 / Trailer 2: 29.94 ton Tare Gross **DRIVER ON AT TARE & GROSS** Predetermined 59,880 102,600 42,720 ᇴ 5 5  $\vec{\lambda}$ 29 94 36 <u>:</u> 46.54 je 19.38

Weighmaster:

Instruct

VERETT, WA 98213

Ship To: 4C808314 Dispatch: 0.0 3C31899-WYSER CONSTRUCTION INC 76:GSA EAST MARGINAL WAY 76:GSA EAST MARGINAL WAY

).00Date:

C8/16/2010

.ocation: 1876

Everett, VVA 98213 6300 Glenwood Ave Weighed At: Soll Remediation N



Weighed At: Soil Remediation

6300 Glenwood Ave. Everett, WA 98213

Location: 1876

40808314

Dispetch:

0.00Date: 08/16/2010

Ship To: 3031899-WYSER CONSTRUCTION INC

76:GSA EAST MARGINAL WAY 7E:GSA EAST MARGINAL WAY

EVERETT, WA 982 i3

Instruct:

Job#: PO: DAN REYNOLDS

Product: 1192508 - CLASS 3 SOIL DUMPED BY TON

Vehicle: 2034258-LL3T,L&LTRANSPORT Tractor / Trailer 1 / Trailer 2: -/- 5 -/-

Qty:	26.91 ton	DRIVE	ARE & GF	E & GROSS					
Weight	naster:		lb	ton	tne				
CEMEX		Gross;	89,800	44.9C	40.73				
Deputy	Weighmaster:	Tare:	35,980	17 98	16.32				
Malla J.	Leake	Net <sup>*</sup>	26.91	24.41					
Scale:	1	*	⊃redeterm	ined Tare	€				
In:	15	Today L	oads:		3				
Out:	10:43 am	Today Q	Today Qty.						

CEMEX'S STANDARD TERMS AND CONDITIONS IN CORPORATED HEREIN.

Signature of Receiving Agent

METRIC CONVERSION FORMULA: POUNDS DIVIDET BY 2204-623, FOU IDED 1 DI2 DEFINALS SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION



1876048793

Weighed At: Soil Remediation

6300 Glenwood Ave Everett, WA 98213

> 40808314 Dispatch:

Location: 1876 0.00Date: C8/16/2010

Ship To: 3031899-WYSER CONSTRUCTION INC

7E:GSA EAST MARGINAL WAY 76:GSA EAST MARGINAL WAY

EVERETT, WA 98213

Instruct:

PO: DANRE/NOLDS

Product: 1192508 - CLASS 3 SOIL JUMPED BY YON

Carrier: -

Vehicle: 2034258 - LL3T, L&LTRANSPORT Tractor / Trailer 1 / Trailer 2: -/- 5 -/-

Qty:	19.36 ton	DRIVER ON AT TARE & CROSS									
Weighm	aster:		lb [	ton	tne						
CEMEX		Gross;	74,700	37.35	33.88						
Deputy 1	W€ighmaster:	Tare:	35,980	17.99	16.32						
Malia J. L	eake	Net: 38,720 19.36 17.5									
Scale:	0		* Manuai	Weight <sup>1</sup>							
In:		Today L	oads:	-	2						
Out:	8:28 arn	Today C	.4.	.44 15 ton							

**Today Qty:** 

CEMEX'S STANDARD TERMS AND CONDITIONS IN CORPORATED HIEREIN.

Signature of Receiving Agent

Driver:

44.15 ton

METRIC CONVERSION FORMULA: PULNES AND DECIDE 2204-623-FOC THEL-50-2 DICLIMALS SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION

METRIC CONVERSION FORMULA: POUNTS DIVIDED BY 22M 123, ROU IDED TO 2 DECIMALS SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION Signature of Receiving Agent

CEMEX'S STANDARD TERMS AND Scale: Deputy Weighmaster: Weighmaster: Malia J. Leake Tractor / Trailer1 / Trailer 2; 29.99 ton 2:58 pm Fare: --- DRIVER ON AT TARE ". coay Loads: Predetermined 95,960 59,980 35,980 17 98 29 99 47.98 넊 131.54 tor GROSS 43.53 16.32

(ERETT, WA 98213

Product: 1192508 - CLASS 3 SOIL DUMPED BY TON

DAN REYNCLDS

2034258-LL3T,L&LTRANSPORT

Carrier:

Order: 40808314 Dispatch: 0.0 Ship To: 3031899-WYSER CONSTRUCTION INC Everett, WA 98213 40808314 76:GSA EAST MARGINAL WAY 76:GSA EAST MARGINAL WAY

0.00Date:

ccation: 1876

6300 Glenwood Ave

ighed At: Soil Remediation 

¥e



### Weighed At: Soil Remediation

6300 Glenwood Ave

Everett, WA 98213

Dispatch:

Location: 1876

Order: 40808314

0.00Date: C8/16/2010

Ship To: 3031899 - WYSER CONSTRUCTION INC

76:GSA EAST MARGINAL WAY

76:GSA EAST MARGINAL WAY EVERETT, WA 98213

Instruct:

Job#:

PO: DAN REYNOLDS

Product: 1192508 - CLASS 3 SOIL DUMPED BY TON

Carrier:

Vehicle: 2034258-LL3T,L&LTRANSPORT Tractor / Trailer1 / Trailer 2: -/- 5 -/-

29.80 ton Qty: --- DRIVER ON AT TARE & GROSS ---Weighmaster: lb ton tne CEMEX Gross: 95,580 47 79 43.35 Deputy Weighmaster: 35,980 17.99 Tare: 16.32 59,600 Malia J. Leake Net: 29.80 27.03 Scale: ≐ Predetermined Tare

Today Loads:

In: Out:

3:25 pm Today Qty: 191.28 ton

CEMEX'S STANDARD TERMS AND CONDITIONS IN CORPORATED HEREIN.

Signature of Receiving Agent

Driver:

METRIC CONVERSION FORMULA: POUND'S CIMIDED BY 2204 527, PUUNDED TO 2 DECIMALS SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION



EHSI-10-1236

East Marginal Way

Parking lot

DATE: August 17, 2010

TONNAGE	SLIPS		29.30	33.56	31.79	33 18													127.83		
TYPE OF TO	S		Class 3 Soil	Class 3 Soil	Class 3 Soil	Class 3 Soil													Total Tons		
<u> </u>	DATE		8/17/2010	8/17/2010	8/17/2010	8/17/2010													Class 3 Soil		
LOCATION			Cemex	Cemex	Cemex	Cemex															
ESTIMATED	QUANTITY		29.30 ton	33.56 ton	31.79 ton	33.18 ton															
DUMP	TIME		8:00 AM	10:48 AM	1:07 PM	3:32 PM															
MANIFEST	#		2816/1876048800	2816/1876048801	2816/1876048803	2816/1876048805															
TRUCKING	COMPANY	!	L & L Transport√	2 L & L Transport	3 L & L Transport	4 L & L Transport															
LOAD	NO.		1	2	3	4	9	9	7	80	6	10	11	12	13	14	15	16	17	18	19



Weighed At: Soil Remediation

6300 Glenwood Ave Everett, WA 98213

40808314

Dispatch:

Location: 1876 0.00Date: 08/17/2010

Ship To: 3031899 - WYSER CONSTRUCTION INC

76:GSA EAST MARGINAL WAY 76:GSA EAST MARGINAL WAY

**EVERETT, WA 98213** 

Instruct

Order:

Job#:

PO: DAN REYNOLDS

-- DRIVER ON AT TARE & GROSS ---

ton

51.55

17.99

33 56

lb

103,100

35.980

67,120

Product: 1192508 - CLASS 3 SOIL DUMPED BY TON

Carrier: -

Vehicle: 2034258-LL3T,L&LTRANS.PORT

Tractor / Trailer1 / Trailer 2: -/- 5 -/-

Qty: 33.56 ton Weighmaster:

CEMEX

Deputy Weighmaster:

Malia J. Leake

Scale: In:

Out:

0:48 am

Today Qty:

\* Predetermined Tale Today Loads:

Gross:

Tare:

Not:

62.86 ton

tne

46.77

16.32

30.45

2

CEMEX'S STANDARD TERMS AND CONDITIONS IN CORPORATED HIEREIN.

Signature of Receiving Agent

Driver:

METRIC CONVERSION FORMULA: POLINICS SIN DECIEY 2204 625, FOR DED TO 2 DECIMALS SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION



1876048800

Weighed At: Soil Remediation

6300 Glerhwood Ave

Everett, WA 98213

Location: 1876 0.00Date: C8/17/2010

40808314 Order: Dispacel:

Ship To: 3031899-WYSER CONSTRUCTION INC

76:GSA EAST MARGINAL WAY 76:GSA EAS MARGINAL WAY

EVERETT, WAG 38213

Instruct:

Job#: PO: DAN REYNOLDS

Product: 1192508 - CLASS 3 SOIL DUMPED BY TON

Carrier: -

Vehicle: 2034258 - LL3T, L&LTRAINS PORT Tractor / Trailer 1 / Trailer 2: -/- 5 -/-

Qtv: 29.30 ton --- DRIVER ON AT TARE & GROSS ---Weighmaster: lb ton tne CEMEX Gross: 94.580 47.29 42.90 Deputy Weighmaster: Tare: 35,980 17.99 16.32 Malia J. Leake 58,600 Net: 29.30 26.58 Scale: \* Predetermined Tare

Out:

in:

Today Loads: Today Qty.

1 29.30 ton

3:00 am CEMEX'S STANDARD TERMS AND CONDITIONS IN CORPORATED HEREIN

Signature of Receiving Agent

Job#:

Product:

1192508 - CLASS 3 SOIL DUMPED BY TON

DAN REYNCLDS

Tractor / Trailer1 / Trailer 2:

Vehicle:

2034258 - LL3T, L&LTRANSPORT

Oriver:

METRIC CONVERSION FORMULA: POUNDS LANDSE PY 2204 620, POUN RED TO 2 DECIMALS SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION

METRIC CONVERSION FORMULA FIGURES SIN DELIGY 2204.628, ROUNDED TO 2 DOLIMALS SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION Signature of Receiving Agent

UTIVE

CEMEX'S STANDARD TERMS AND CONDITIONS IN CORPCIRATED HIERBIN

Deputy Weighmaster Scale: Malia J. Leake CEME Weighmaster: 31 79 .i S T ġ Net: Tare: -- DRIVER ON AT Today City: Today Loads: SSOLE Predetermined 63,580 99,560 35,980 ᇴ TARE & GROSS 49 ğ ω 17 <u>ال</u>ا ်မ္တ 78 94.65 45.16 16.32 ine. 28 헣 8 ω

Instruct Ship To: Order: Everett, WA 98213 6300 Glenwood Ave Weighed At: Soil Remediation 3031899-WYSER CONSTRUCTION INC EVERETT, WA 98213 4C808314 76:GSA EAST MARGINAL WAY 76:GSA EAST MARGINAL WAY Dispatch:

0.00Date:

C8/17/2010

.ccation: 1876



### Weighed At: Soll Remediation

6300 Glenwood Ave

Everett, WA 98213

Location: 1876

Order: 40808314

08314 Dispatch:

0.00Date: C8/17/2010

Ship To: 3031899-WYSER CONSTRUCTION INC

76:GSA EAST MARGINAL WAY 76:GSA EAST MARGINAL WAY

E\ ERETT, WA 98213

Instruct:

Job#:

PO: DAN REYNOLDS

Product: 1192508 - CLASS 3 SOIL DUMPED BY TON

Carrier: -

Vehicle: 2034258-LL3T,L&LTRANSPORT Tractor / Trailer1 / Trailer 2: -/- 5-/-

Qty:	33.18 ton	DRIVE	ARE & GF	RE & GROSS					
Weighm	aster:		lb l	ton	tne				
CEMEX		Gross;	102,340	51.17	46.42				
Deputy 1	Weighmaster:	Tare:	35.980	17.98	16.32				
Malia J. L	.eake	Net: 66.360 33.18 30.1							
Scale:	1		nined Tare	€					
In:		Foday L	Today Loads:						
Out:	3:32 pm	Today 0	Today City: 127.						

CEMEX'S STANDARD TERMS AND CONDITIONS INCORPORATED HERISIN

Signature of Receiving Agent

Driver:

METRIC CONVERSION FORMULA; POUNDED ANY CREED A 2004 623 PROUNDED TO 2 DECIMALS SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION



EHSI-10-1236 East Marginal Way

Parking lot

DATE: August 18, 2010

				42 45	42 00	70.7				20 74 425 64	40.07								7	÷
TONNAGE	SLIPS	14 54	13.94	13 97 42 45	12 82 12 82	14.02	31 10	30.30	23.72	30.14	20.7							168 09	12.82	20.21
TYPE OF	MATERIALS	Class 3 Soil	L			an idea.	Clase 3 Soil	Class 3 Soil	Class 3 Soil	Class 2 Soil	000000000000000000000000000000000000000							Total Tons	Total Tons	
	DATE	8/18/2010	8/18/2010	8/18/2010	8/18/2010		8/18/2010	8/18/2010	8/18/2010	8/18/2010	2000							Class 3 Soil	Asphalt	
LOCATION		Cemex	Cemex	Cemex	United Recyclina		Cemex	Сешех	Cemex	Cemex										
ESTIMATED	QUANTITY	14.54 ton	13.94 ton	13.97 ton	12.82 ton		31.40 ton	i .	<u> </u>	30.71 ton										
DUMP	TIME	8:15 AM	10:34 AM	12:43 PM	3:46 PM		8:13 AM	10:29 AM	12:57 PM	3:41 PM										
MANIFEST	*	1144/1876048808	1144/1876048810	1144/1876048815	1144/98902√		2817/1876048807	2817/1876048809	2817/1876048816	2817/1876048817										
TRUCKING	COMPANY	1 Wyser Construction	2 Wyser Construction	3 Wyser Construction	4 Wyser Construction		6 L & L Transport√	7 L & L Transport	8 L & L Transport	9 L & L Transport										
LOAD	Ö.	_	2	က	4	5	9	7	8	6	10	11	12	13	14	15	16	17	18	19

### UNITED RECYCLING CO.

18827 YEW WAY \* SNOHOMISH, WA 98296 OFFICE: 425-485-0355 FAX: 360-668-9252

## CHARGE TICKET

DATE:

8/18/10

I / WE, THE UNDERSIGNED, CERTIFY THAT THE PRODUCT DELIVERED FOR DISPOSAL IS NON-HAZARDOUS RECYCLABLE MATERIAL

TIME IN:

3:46PM

TICKET #:98902

ACCT #:

2053-001 WYSER CONSTRUCTION INC

PRODUCT: CL ASPHALT

TRUCK#: WY30

PO#/JOB#: EHSI-10-1236

NOTES:

Yards: 0

Gross:

52,540

lbs

Tare:

26,900

lbs

Net Wt:

25,640

lbs .

Tons :

12.82

**AUTHORIZED SIGNATURE** 



Weighed At: Soil Remediation

6300 Glenwood Ave Everett, WA 98213

Location: 1876

40808314 Order:

Dispatch: Ship To: 3031899-WYSER CONSTRUCTION INC

0 00 Date: C8/18/2010

76:GSA EAST MARGINAL WAY

76:GSA EAST MARGINAL WAY

**EVERETT, WA 98213** 

Instruct:

Job#: PO: DAN REYNOLDS

Product: 1192508 - CLASS 3 SOIL DUMPED BY TON

Carrier: -

Vehicle: 2146148-VVC30S,WYSER CONSTRUCION INC

Tractor / Trailer1 / Trailer 2: -/- -/-

13.94 ton Qty: --- DRIVER ON AT TARE & GROSS ---Weighmaster: lb ton tne **CEMEX** Gross: 54,680 27.34 24.80 Deputy Weighmaster: Tare: 26,800 13.4C 12.16 Malla J. Leake 27,880 Net: 13.94 12.65 Scale: \* Predetermined Tare In: Today Loads: Out: 0:34 am

Today City: 90.27 ton

CEMEX'S STANDARD TERMS AND CONDITIONS IN CORPORATED HEREIN.

Signature of Receiving Agent

METRIC CONVERSION FORMULA: POLITICS CITY DECISY 2204-523, ROUNDED TO 2 DECIMALS SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION



1876048808

Weighed At: Soil Remediation

6300 Glenwood Ave Everett, WA 98213

Lecation: 1876

40808314 Order: Dispatch:

0.00Date: C8/18/2010

Ship To: 3031899-WYSER CONSTRUCTION INC

76:GSA EAST MARGINAL WAY 76:GSA EAST MARGINAL WAY

EVERETT, WA 98213

Instruct

Job#: FO: DAN REYNOLDS

Product: 1192508 - CLASSIB SOIL DUMPED BY TOH

Carrier: -

Out:

Vehicle: 2146148 - WC30S, WYSER CONSTRUCION INC

Tractor / Trailer 1 / Trailer 21: -/- /-

4.54 ton Qty: --- DRIVER ON AT TARE & GROSS ---Weighmaster: lb ton tne CEMEX Gross: 55,880 27.94 25.35 Deputy Weighmaster: Tare: 26,800 13.4C 12.16 Malia J. Leake Net: 29,080 14.54 13.19 Scale: Predetermined Tare In: Today Loads: 2

Today City:

3:15 am CEMEX'S STANDARD TERMS AND CONDITIONS IN CORFORATED HIEFEIN

Signature of Receiving Agent

Carrier

Product:

1192508 - CLASS 3 SOIL DUMPED BY TON

DAN REYNCLDS

Vehicle:

2146148-WC30S,WYSER CONSTRUCION INC

Tractor / Trailer1 / Trailer 2:

Driver:

45.94 ton

METRIC CONVERSION FORMULA: FOUND STOVE TO BE 22/14/023, POINTLEB TO 2 DOUG SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION STOME TO BE 2264 623, POPULIED TO ZIDDLE MALS

METRIC CONVERSION FORMULA: POUNDS DIVIDED BY 2204,023, ROUNDED TO 2 DEUMALS SEE F.EVERSE SIDE FOR PRODUCT LABEL INFORMATION Signature of Reselving Agent

Driver:

CONDITIONS IN CORPORATED HEREIN

Scale: Malla J Deputy Weighmaster: Weighmaster: Leake [2:43 13.97 ton E Net Į Sie Gross Today City:

Today Loads: --- DRIVER ON AT TARE & GROSS Predetermined 27,940 54,740 26,800 13.4C 교 93 97

ton 27.37 1:04.24 ton 12.16 24.83 12.67 9 O

instruct

**EVERETT, WA 98213** 

Ship To: Order: Everett, WA 98213 40808314 Dispatch: 0.0 3031899-WYSER CONSTRUCTION INC 76:GSA EAST MARGINAL WAY 40808314 76:GSA EAST MARGINAL WAY

0.00**Date**:

C8/18/2010

Location: 1876

6300 Glenwood Ave At: Soil Remediation

3



Weighed At: Soil Remediation

6300 Glenwood Ave Everett, WA 98213

Location: 1876

Order: 40808314

Dispetch:

Ship To: 3031899-WYSER CONSTRUCTION INC

0.00Date; 08/18/2010

7E:GSA EAST MARGINAL WAY 76:GSA EAST MARGINAL WAY

EVERETT, WA 98213

Instruct

Job#:

PO: DAN REYNOLDS

Product: 1192508 - CLASS 3 SOIL DUMPED BY TON

Carrier:

Vehicle: 2034258-LL3T,L&LTRANSPORT Tractor / Trailer1 / Trailer 2: -/- 5 -/-

Qty: 30.39 ton --- DRIVER ON AT TARE & GROSS ---Weighmaster: ib ton tne **CEMEX** Gross: 96,760 48.38 43.89 Deputy Weighmaster: 35,980 Tare: 17.98 16.32 Malia J. Leake 60,780 30,39 27.57 Scale: Predetermined Tare

ln:

Out:

10:29 am

Today Loads: Today City:

3 76.33 ton

CEMEX'S STANDARD TERMS AND CONDITIONS IN CORPORATED HEREIN

Signature of Receiving Agent

Driver:

Weighmaster:

METRIC CONVERSION FORMULA: POUNDS ON DECISIVATED BY 2204-927 POUNDED TO 2 DEPOMALS SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION



1876048807

0.00Date:

Weighed At: Soil Remediation

6300 Glenwood Ave Everett, WA 98213

1.ocation: 1876 C8/18/2010

Order: 40808314 Dispatch: Ship To: 3031899-WYSER CONSTRUCT ON INC

76:GSA EAST MARGINAL VAY 76:GSA EAST MARGINAL WAY

EVERETT, WA 98213

Instruct:

Job#: **PO: DAN REYNOLDS** 

Product: 1192508 - CLASS 3 SOIL DUMPED BY TON

Carrier: -

Vehicle: 2034258-LL3T,L&LTRANSPORT Tractor / Trailer1 / Trailer 2: -/- 5 -/-

Qty:	31.40 ton	DRIVER ON AT TARE & GROSS								
Weighm	aster:		lb	ton	tne					
CEMEX		Gross:	98,78C	49.39	44.81					
	V∈ighmaster:	Tare:	35,980	17.99	16.32					
Malia J. L	eake	Nex	31 4C	28.49						
Scale:	1	* F	ined Tare							
In:		T∋day L	oads:		1					
Out:	3:13 am	Today Q	3	31,40 ton						

CEMEX'S STANDARD TERMS AND CONDITIONS IN CORPORATED HEREIN

Signature of Receiving Agent

Driver:

31.40 ton

METRIC CONVERSION FORMULA: POUNDS DIVIDED BY 220M 523 ROUNDED TO 2 DISTINALS SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION

Signature of Receiving Agent

METRIC CONVERSION FORMULA: POUND - DIVIDED BY 2204 O 'S, P. UNIDED TO 2 DECIMALS SEE REVERSE SIDE FOR PRODUCT LABEL (NFORWATION.)

Driver

CEMEX'S STANDARD TERMS AND

Foday City:

Scale: Malia J. Leake Deputy Weighmaster: 2:57 Ŋ

Tare Gross -- DRIVER ON AT foday Loads: Predetermined Ta 202 66,280 35 080 TARE & မ္ဟ

17.98 ton 51, 13 7 1.37.38 GROSS ---30.06 46.38 16.32 i ne ğ

Instruct

VERETT, WA 98213

Vehicle: 2034258-LL3T,L&LTRANSPORT

Tractor / Trailer1 / Trailer 2:

+84

33.14

헣

Product: 1192508 - CLASS 3 SOIL DUMPED BY TON Ş DAN REYNCLDS

Order: 4C808314 Dispetch: 0 ( Ship To: 3C31899-WYSER CONSTRUCTION INC 6300 Glenwood Ave Welghed At: Soil Remediation verett, WA 98213 76:GSA EAST MARGINAL WAY 76:GSA EAST MARGINAL WAY

0 00Date:

C8/18/2010

ocation: 1876



Weighed At: Soil Remediation

6300 Glenwood Ave

Everett, WA 98213

Location: 1876 0.00Date: C8/18/2010

Order: 40808314 Dispatch: Ship To: 3031899 - WYSER CONSTRUCTION INC

76:GSA EAST MARGINAL WAY 76:GSA EAST MARGINAL WAY

EVERETT, WA 98213

Instruct:

Job#:

PO: DANREYNOLDS

Product: 1192508 - CLASS 3 SOIL DUMPED BY TON

Carrier: 🐇

Vehicle: 2034258-LL3T,L&LTRANSPORT

Tractor / Trailer 1 / Trailer 2: -/- 5 -/-

Qty: --- DRIVER ON AT TARE & GROSS ---30.71 ton Weighmaster: lb ton tne CEMEX Gross: 97,400 48 7C 44.18 Deputy Weighmaster: Tare: 35,980 17.98 16.32 Malla J. Leake Net: 61,420 30 71 27.86 Scale: \* Predetermined Tare

Today Loads:

In: Out:

3:41 orn

Today City:

168.09 ton

CEMEX'S STANDARD TERMS AND CONDITIONS IN CORPORATED HEREIN.

Signature of Receiving Agent

METRIC CONVERSION FORMULA: POUND IN DIFFIDE BY 2201 623, ROUNDED TO 2 DIFFIRM SEE F.EVERSE SIDE FOR PRODUCT LABEL INFORMATION



EHSI-10-1236 East Marginal Way

Parking lot

**DATE: August 19, 2010** 

	ш		_	I	T.=	Tee	31 03 122 21		·		_	_	_	_	_				<u> </u>		_	_
	TONNAGE	SLIPS		29.45	31.50	30.23	31 03													122.21		
	TYPE OF	MATERIALS		Class 3 Soil	Class 3 Soil	Class 3 Soil	Class 3 Soil													Total Tons		:
	_	DATE		8/19/2010	8/19/2010	8/19/2010	8/19/2010													Class 3 Soil		
	LOCATION			Cemex	Cemex	Cemex	Cemex								:						:	
	ESTIMATED	QUANTITY		29.45 ton	31.50 ton	30.23 ton	31.03 ton	ı											į			
	DUMP	TIME		8:00 AM	10:24 AM	12:47 PM	3:25 PM		:					i								
•	MANIFEST	**		2818/1876048818	2818/1876048819	2818/1876048820	2818/1876048822															
	TRUCKING	COMPANY		L & L Transport	2 L & L Transport	3 L & L Transport	4 L & L Transport															
	LOAD	NO.		1	2	3	4	2	9	7	8	6	10	11	12	13	14	15	16	11	18	19



Weighed At: Soil Remediation

6300 Glenwood Ave Everett, WA 98213

Location: 1876

40808314 Order:

Dispatch:

0.00Date; C8/19/2010

Ship To: 3031899-WYSER CONSTRUCTION INC

76:GSA EAST MARGINAL 'VAY 76:GSA EAST MARGINAL WAY

EVERETT, WA 98:213

Instruct:

Job#: PO: DAN REYNOLDS

Product: 1192508 - CLASS 3 SOIL DUMPED BY TON

Carrier:

Vehicle: 2034258-LL3T,L&LTRANSPORT Tractor / Trailer 1 / Trailer 2: -/- 5 -/-

Qty:	31.50 ton	DRIVER ON AT TARE & GROSS								
Weigh	master:		lb	ton	tne					
CEMEX		Gross:	98,980	49 49	44.90					
Deputy	/ Weighmaster:	Tare:	35,980	17.99	16.32					
Malla J.	Leake	Net:	63,000	31.50	28.58					
Scale:	1	* Predetermined Tare								

In:

Out:

[ 0:24 an1

Today Loads: Today Qty:

CEMEX'S STANDARD TERMS AND CONDITIONS IN CORPORATED HEREIN.

Signature of Receiving Agent

Driver:

30.95 ton

2

METRIC CONVERSION FORMULA: POUNDS SIVIDED BY 2204-623, ROUGIDED TO 3 DECIMALS SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION



1876048818

Weighed At: Soil Remediation

6300 Glenwood Ave Everett, WA 98213

40808314 Order: Diapatch:

Location: 1876 :etsC00.0 C8/19/2010

Ship To: 3031899-WYSER CONSTRUCTION INC

76:GSA EAST MARGINAL WAY 76:GSA EAST MARGINAL WAY

EVERETT, WA 98213

Instruct:

Job#: PO: DAN REYNOLDS

Product: 1192508 - CLASS 3 SOIL DUMPED BY TON

Carrier:

Vehicle: 2034258-LL3T,L&LTRANSPORT Tractor / Trailer1 / Trailer 2: -/- 5 -/-

Qty:	29.45 ton	DRIVER ON AT TARE & GROSS							
Weighn	naster:		ton	tne					
CEMEX		Gross:	94,880	47.44	43.04				
Deputy	Weighmaster:	Tare:	35,980	17.99	16.32				
Malia J. I	Leake	Net:	58,900	29 45	26.72				
Scale:	1	* 1	nin <b>e</b> d Tar	<del>9</del>					
In:		Today L		1					
Out:	8:00 am	Today Q	2	29.45 ton					

CEMEX'S STANDARD TERMS AND CONDITIONS INCORPORATED HEREIN.

Signature of Receiving Agent

Fractor / Trailer 1 / Trailer 2:

¥5+

Vehicle: Carrier: Product:

2034258-LL3T,L&LTRANSPORT

1192508 - CLASS: 3 SOIL DUMPED BY TON

DAN REYNCLDS

Driver:

METRIC CONVERSION FORMULA: POUNDEDOM DECIDIO 2204 623, RQUINDELI TO 2 DECIMALS SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION

CEMEX'S STANDARD TERMS AND CONDITIONS IN CORPORATED HIEREIN Signature of Receiving Agent

METRIC CONVERSION FORMULA: POUNDS DAY DEL BY 2204 823, POUNDED TO 2 DECIMALS SEE FIEVERSE SIDE FOR PRODUCT LABEL INFORMATION

Scale: Malia J. Leake Disputy Weighmaster Weighmaster: 30.23 ton 2:47 pm Tare: --- DRIVER ON AT TARE & GROSS ---Gross: Foday City: Coday Loads: Predetermined 60,460 35,980 96,440 ᇹ 48.22 8 17.98 Ta e 23 91.18 27.42 43.74 Ħ 16.32

Instruct

EVERETT, WA 98213

Order: 40808314 Disperch: 0.0 Ship To: 3031899 - WYSER CONSTRUCTION INC. Everett, WA 98213 76:GSA EAST MARGINAL WAY 76:GSA EAST WARGINAL WAY

0.00Date.

C8/19/2010

.ccation: 1876

6300 Glenwood Ave Weighed At: Soil Remediation 



### Weighed At: Soil Remediation

6300 Glenwood Ave

Everett, WA 98213

Location: 1876

Order: 40808314

Dispatch:

0.00Date: C8/19/2010

Ship To: 3031899-WYSER CONSTRUCTION INC

76:GSA EAST MARGINAL WAY 76:GSA EAST MARGINAL WAY

**EVERETT, WA 98213** 

Instruct:

PO: DAN REYNOLDS

Product: 1192508 - CLASS 3 SOIL DUMPED BY TON

Carrier: ::

Vehicle: 2034258-LL3T,L&LTRANSPORT Tractor / Trailer1 / Trailer 2: -/- 5 -/-

--- DRIVER ON AT TARE & GROSS ---31.03 ton QIV: Weighmaster: lb ton tne **CEMEX** Gross: 98,040 19.02 44.47 Deputy Weighmaster: 35,980 Tare: 17.99 16.32 Malla J. Leake 62,060 31.03 Net: 28.15

Scale:

\* Predetermined Tare

In: Out:

Today Loads: 3:25 pm

Today City:

122.21 ton

CEMEX'S STANDARD TERMS AND CONDITIONS IN CORPORATED HEREIN.

Signature of Receiving Agent

Driver:

METRIC CONVERSION FORMULA: POURDS 0 VIDEO BY 2204-822 RQUILDED TO 2 DECIMALS SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION!



# **EXPORT MATERIALS LOG**

EHSI-10-1236 Eas

East Marginal Way

Parking lot

DATE: August 20, 2010

TONNACE	SLIPS		30.36	34 33	32.38	20 42	25.43			T			T				T		122 40	23.40	-
TYPE OF T	S	T	Class 3 Soil	Class 3 Soil	Class 3 Soil	Clace 3 Soil	100 O CO C		+			+							Total Tone	+	
<u> </u>	DATE	Т	8/20/2010	8/20/2010	8/20/2010	8/20/2010	0102020												Clace 3 Soil		
LOCATION			Cemex	Cemex	Cemex	Cemex															
ESTIMATED	QUANTITY		30.36 ton					-													
DUMP			8:08 AM	10:30 AM	1:04 PM	3:47 PM															
MANIFEST	*		2819/1876048825	2819/1876048836	2819/1876048838	2819/1876048842															
TRUCKING	COMPANY		L & L Transport√	2 L & L Transport	3 L & L Transport	- & L Transport															
LOAD	S S		7	2 1	3.1	4 1	9	9	7	8	6	10	11	12	13	14	15	16	17	18	



### 1876048836

Weighed At: Soil Remediation

6300 Glenwood Ave Everett, WA 98213

Location: 1876

40808314 Order:

Dispatch: Ship To: 3031899-WYSER CONSTRUCTION INC

0.00Date:

C8/20/2010

76:GSA EAST MARGINAL WAY

76:GSA EAST MARGINAL WAY

EVERETT, WA 98213

Instruct:

Job#:

PO: DAN REYNOLDS

Product: 1192508 - CLASS 3 SOIL DUMPED BY TON

Carrier: ==

Vehicle: 2034258-LL3T,L&LTRANSPORT

Tractor / Trailer1 / Trailer 2: -/- 5 -/-31.33 ton Qty: -- DRIVER ON AT TARE & GROSS ---

Weighmaster: CEMEX

Deputy Weighmaster: Malia J. Leake

Scale: in:

Out:

10:30 am

62,660 Net: \* Predetermined Tare **Today Loads:** 

Gross:

Tare:

Today Qty: 31.69 ton

lb

98.640

35,980

ton

49 32

17 99

31.33

CEMEX'S STANDARD TERMS AND CONDITIONS IN CORPORATED HEREIN.

Signature of Receiving Agent

Driver:

CEMEX

Weighmaster:

Š

Tractor / Trailer1 / Trailer 2:

1-1-4

Malia J

Leake

Scale:

tne

44.74

16.32

28.42

2

METRIC CONVERSION FORMULA: POUTIL: . . . DET EY 2004 623, FOU IDED TO 2 DECIMALS SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION



1876048825

Weighed At: Soil Remediation

6300 Glenwood Ave Everett, WA 98213

Location: 1876

C8/20/2010

Order: 40808314 Dispatch. 0.00Date: Ship To: 3031899-WYSER CONSTRUCTION INC

76:GSA EAST MARGINAL WAY

76:GSA EAST MARGINAL WAY EVERETT, WA 98213

Instruct:

Job#: PO: DAN REYNOLDS

Product: 1192508 - CLASS 3 SOIL DUMFED BY TON

Carrier: -

Out:

Vehicle: 2034258-LL3T,L&LTRANSFORT Tractor / Trailer 1 / Trailer 2: -/- 5 -/

Qty: 30.36 ton --- DRIVER ON AT TARE & GROSS ---Weighmaster: Jb. ton tne CEMEX Gross; 96,700; 48.35 43.86 Deputy Weighmaster: Tare: 35,980 17 99 16.32 Malia J. Leake 60,720 Net: 30 36 27.54 Scale: \* Predetermined Tare In: Today Loads:

Today City:

CEMEX'S STANDARD TERMS AND CONDITIONS INCORFORATED HEREIN.

3:08 am

Signature of Receiving Agent

Driver:

30.36 ton

METRIC CONVERSION FORMULA: 17:14 THE SERVINGE BY 22:14 023:14 024:10 FEBRUARY OF THE SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION

CEMEX'S STANDARD TERMS AND CONDITIONS IN CORPORATED HIFEIN

METRIC CONVERSION FORMULA: PICHTES STY DED BY 2004 923, ROUNDED TO 2 DETIMALS SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION Signature of Receiving Agent

9

E

Deputy Weighmaster: 32.36 ton Today City: are Coday Loads: Gross DRIVER ON AT Predetermined Ta 35,980 100,700 64,720 TARE & GROSS 17.98 32 50 ၾ ω 94.05 45.68 16.32 29 ä 헣

Instruct

Carrier: Vehicle: 2034258-LL3T,L&LTRANSPORT Product: 1192508 - CLASS 3 SOIL DUMPED BY TON

ERETT, WA 98213 DAN RETNICLDS

Order: 40808314 Dispatch: 0.0 Ship To: 3031899 - WYSER CONSTRUCTION INC 6300 Glenwood Ave Weighed At: Soil Remediation /erett, W/A 98213 76:GSA EAST MARGINAL WAY 40808314 76:GSA EAST MARGINAL WAY

0.00**Date**:

.acation: 1876

(f)

XUE



### 1876048842

### Weighed At: Soil Remediation

6300 Glenwood Ave

Everett, WA 98213

Lacation: 1876

Order: 40808314

Dispatch:

0.00Date: C8/20/2010

Ship To: 3031899-WYSER CONSTRUCTION INC

76:GSA EAST MARGINAL WAY 76:GSA EAST MARGINAL WAY

EVERETT, WA 98213

Instruct:

Job#:

PO: DAN REYNOLDS

Product: 1192508 - CLASS 3 SOIL DUMPED BY TON

Carrier: -

CEMEX

Vehicle: 2034258-LL3T,L&LTRANSPOR.

Tractor / Trailer 1 / Trailer 2: -/- 1 -/-

Qty: 29.43 ton

Weighmaster:

lb ten tne Gross: 94,840 47 42 43.02 Tare: 35,980 17 99 16.32

Deputy Weighmaster: Malia J. Leake Scale:

58,860 29.43 \* Predetermined Tare

--- DRIVER ON AT TARE & GROSS ---

In:

Today Loads:

26.70

Out:

Today Qty:

Net:

1:23.48 ton

CEMEX'S STANDARD TERMS AND CONDITIONS IN CORPCIPATED HIEREIN.

3:47 pm

Signature of Receiving Agent

Driver:

METRIC CONVERSION FORMULA: POUNDS DO DECENT 2204 527, ROUNDED TO 2 DECEMBLS SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION



# **EXPORT MATERIALS LOG**

EHSI-10-1236 East Margi

East Marginal Way

Parking lot

DATE: August 23, 2010

川	Г	Т	Ι <u>σ</u>	Į.	$\top$	Т	T	$\top$	T	Ţ	_	Т	_	Т	Τ-	T	_	Т	Т	_	Т
TONNAGE	SLIPS		9 30																0 30	3	
TYPE OF	MATERIALS		Class 3 Soil			,					!				i.				Total Tons		
	DATE		8/23/2010				İ												Class 3 Soil		
LOCATION			Cemex																		
ESTIMATED	QUANTITY		9.39 ton																		
DUMP	TIME		2:32 PM																		
MANIFEST	#		2820/1876048866																		
TRUCKING	COMPANY		L & L Transport																		
LOAD	ON ON		1	2	3	4	9	9	7	80	0	10	11	12	13	14	15	16	17	18	19



### 1876048866

### Weighed At: Soil Remediation

6300 Glenwood Ave

Everett, WA 98213

Location: 1876

Order: 40808314

Dispatch:

0 00Date: C8/23/2010

Ship To: 3031899-WYSER CONSTRUCTION INC

76:GSA EAST WARGINAL WAY 76:GSA EAST MARGINAL WAY

E\/ERETT, WA 98213

Instruct:

Job#:

PO: DAN REYNOLDS

Product: 1192508 - CLASS 3 SOIL DUMPED BY TON

Carrier: -

Vehicle: 2034258-LL3T,L&LTRANSPORT

Tractor / Trailer 1 / Trailer 2: -/- 1 -/-

--- DRIVER ON AT TARE & GROSS ---9.39 ton Qty: Weighmaster: lb ton CEMEX Gross: 54,760 27.38 35,980 17 99 Tare: Deputy Weighmaster:

Net:

Malia J. Leake

18,780 \* Precetermined Tare

9.39

Scale: In:

Today Loads:

Out:

Today City:

9.39 ton

24.84

16.32

8.52

CEMEX'S STANDARD TERMS AND CONDITIONS IN CORPORATED HIEF:EIN

2.32 pm

Signature of Receiving Agent

METRIC CONVERSION FORMULA: POLING ROW DECIETY 2204 523 FINDSTILLED TO 2 DEFINALS SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION



# **EXPORT MATERIALS LOG**

EHSI-10-1236 East Marginal Way

Parking lot

**DATE: August 24, 2010** 

MANIFEST
*
2821/176641
2821/101278

### RENTON CONCRETE RECYCLERS

22121 17th Ave. S.E., Suite 117 - Bothell, WA 98021
PIT SITE: 500 MONSTER RD. S.W.
RENTON, WA 98055
(BLACK RIVER QUARRY SITE)

Nº 176641

ustome	er	NSEL	2 00	onstr_	PI	none:	447	
ddress			70tt	トオンレー	10-103	200	10	
elivery	Address							
pecial I	nstructio	ns					4-5 5	
auler's	Name _	1514	iansp	ort	Scalep	erson 1	Mu	<b>S</b>
			C	ASH	CHARGE	U		
								-
RUCK#	TIME	MATERIAL	GROSS	TARE	NET	NET T/YDS	PRICE	DRIVER'S SIGNATURE
· · · ·	33	HSON		11= =11 (c) V	J-Sm	8.		
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NOTICE: It is specifically agreed that this company shall not be in anyway responsible for damage to customer's property, resulting in deliveries beyond curb line

TERMS. NET 15 DAYS from the end of the month. A finance charge will be assessed on all past due accounts at a rate of 1 1/2% per month. Annual finance charge of 18%.

		- 41		
			e en broggiste i de e	
	SITE TICKET		GRID	
		WEIGH	IMASTER	
WILLEO WASTE PROTONAL DISPLEME CONTAIN		1.75	(NYM:	
BACK RIVER TRAVETER STATION	DATE IN	Acces to	THEIN	
SOL MONSTER SOAD	WKKKI			
THENTON LIFE PROTES	DATE OUT	1 9 Marile 1 1	TIME OUT	
012878		gras 2010	100	FF4H
weser Construction Inc.	VEHICLE	A second second of	ROLL OFF	30-46-54
iscis with masse	July Sale	mests 17510	12257	T als
Scriptionitati, Wa 198096	REFERENCE	ORIGIN		
	* MARIESO			
Contracts CDL SEATTLE //Since		· · · · · · · · · · · · · · · · · · ·		
		in the same	TILE ROA	**
OO Gross Height 38,500,00 th/ 24		L TRAILEU		
QTY I WINIT TO THE TAIL TO DESCRIPTION	RATE	EXTENSION	TAX	LATOT
det de grit 2,360.00 In 1,45 In				
			Land Bright	11/4/2 193
1.17 TN CMD	<b>15.0</b> 0 (C)	\$95. do.	19.31	51.085.51
1236				
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You House				
Job# #NL-10-1236				
			40.23 11	1
	加入野山		3.6%	
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AFETY MEMOS:	+ Blanca	1 .1		CHANGE
AFETY MEMOS:	CR STATE	on)/		
				CHECK NOV
Hard hats MUST be worn.				Guida, IIga
High Visibility vests MUST be worn.			the same and the same and	
Passengers MUST remain in vehicle at all times. SIGNATURE	1 Curry			MIE.
			***	
		- <del> </del>		
•				



EHSI-10-1236 East Marginal Way

Parking Lot

DATE: August 3, 2010

				94.36			95.95											_	
TONNAGE	SLIPS	31.64	31.46	31.26 94.36	32.71	31.84	31.40 95.95											190.31	
TYPE OF	MATERIALS	Gravel Borrow	Gravel Borrow	Gravel Borrow	Gravel Borrow	Gravel Borrow	Gravel Borrow		,									Total Tons	
_	D'ATE	8/3/2010	8/3/2010	8/3/2010	8/3/2010	8/3/2010	8/3/2010												
LOCATION		Calportland	Calportland	Calportland	Calportland	Calportland	Calportland												
ESTIMATED	QUANTITY	31.64 ton	31.46 ton	31.26 ton	32.71 ton	31.84 ton	31.40 ton												
LOAD	TIME	7:07 AM	9:45 AM	12:23 PM	7:05 AM	9:44 AM	12:20 PM												
MANIFEST	#	1136/9698351	1136/969853	1136/969873	2807/969834	2807/969852	2807/969872												
TRUCKING	COMPANY	1 Wyser Construction	2 Wyser Construction	3 Wyser Construction	4 L & L Transport	5 L & L Transport	6 L & L Transport												
LOAD	NO.	1	2	3	4	5	9	7	8	6	10	11	12	13	14	15	16	17	18

### NO: 969835 **DELIVERY TICKET PLANT NO.177** Qty. Today: 64.35 Ton 8/3/2010 7:07:39 AM CUSTOMER: 80045 Seattle Aggregate Yard Loads: 2 SOLD TO: WYSER CONSTRUCTION, INC. mTON TON LB ORDER: 52.84 47.94 GROSS 105680 2010 PICKED UP PRICES 21.20 19.23 TARE 42400 28.70 31.64 NET 63280 P.0.: EHSL-10-1236 31.64 Ton PRODUCT: 8128 Gravel Borrow/Type 17 WEIGHMASTER: \_ DEL. TO: MTL. FRT. ZONE: ENVIRO. HAULER #: 999 TRUCK #: WYS30 TAX TOTAL RECEIVED BY:

GLACIER NORTHWEST, INC. (206)938 - 6761

<b>DELIVERY T</b>	ICKET		NU:	909803
PLANT NO.	177			
8/3/2010	9:45:59 AM		lay: 127.65	Ton
CUSTOMER: SOLD TO:	80045 Seattle Aggreg WYSER CONSTRUCTION, INC.			TON
ORDER:	FOB 2010 PICKED UP PRICES	CROSS 105320 TARE 42400	TON 52,66 21,20	mTON 47-77 19.23 28.54
P.0.:	EHSL-10-1236	NET 62920	31 . 46	20.34
PRODUCT:	8128 Gravel Borrow/T	ype 17	31.46 T	on
DEL. TO:		WEIG	HMASTER: _	
ZONE: HAULER #: TRUCK #: RECEIVED	999 WYS30 RY:	MTL. FRT. ENVIRO. TAX TOTAL		

**DELIVERY TICKET** 

969873 NO:

Qty. Today: 190.31 Ton PLANT NO.177

CUSTOMER: 80045 Seattle Aggregate Yard Loads: 6

WYSER CONSTRUCTION, INC.

mTON. 47.59 SOLD TO: 52-46 GROSS 104920 19.23 21 20 2010 PICKED UP PRICES 42400 ORDER: TARE 28.36 31.26

62520 NET EHSL-10-1236 31.26 Ton

P.0: Gravel Borrow/Type 17 WEIGHMASTER: \_ 8128 PRODUCT:

DEL. TO:

MTL. FRT. ENVIRO. ZONE: HAULER #: 999 TAX TRUCK #: WYS30 TOTAL

RECEIVED BY: GLACIER NORTHWEST, INC. (206)938-6761 **DELIVERY TICKET** PLANT NO.177 Qty. Today: 32.71 Ton 7:05:48 AM 8/3/2010 CUSTOMER: 80045 Seattle Aggregate Yard Loads: WYSER CONSTRUCTION, INC. mTONTON SOLD TO: LB 46-09-50.81 GROSS 101620 ORDER: 2010 PICKED UP PRICES 16.42 18.10 36200 TARE 29.67 32.7165420 NET EHSL-10-1236 P.0.+ 32.71 Ton Gravel Borrow/Type 17 8128 PRODUCT : WEIGHMASTER: \_ DEL. TO: MTL. FRT. ENVIRO. ZONE: HAULER #: 999 TAX TRUCK #: L&L TOTAL RECEIVED BY \_ GLACIER NORTHWEST, INC. (206)938-6761

NO:

NO: 969852 **DELIVERY TICKET** PLANT NO.177 8/3/2010 9:44:02 AM Qty. Today: 96.19 Ton CUSTOMER: 80045 Seattle Aggregate Yard Loads: 3 WYSER CONSTRUCTION, INC. mTON LB TON

SOLD TO:

ORDER: GROSS 99880-49.94 45.30 2010 PICKED UP PRICES TARE 36200 18.10 16.42 63680 **NET** 31.84 28.88 P.0.: EHSL-10-1236

PRODUCT: 8128 Gravel Borrow/Type 17 31.84 Ton

DEL. TO: WEIGHMASTER:

MTL. ZONE: FRT. HAULER #: 999 ENVIRO. TRUCK #: L&L XAT TOTAL

**GLACIER MORTHWEST, INC. (206)938-6761** 

RECEIVED BY:

**DELIVERY TICKET** Qty. Today: 159.05 Ton PLANT NO.177 12:20:09 PM 8/3/2010 CUSTOMER: 80045 Seattle Aggregate Yard Loads: 5 WYSER CONSTRUCTION, INC. mTON. TON LB SOLD TO: 44-91 49.50 99000 **GROSS** ORDER: 2010 PICKED UP PRICES 16.42 18.10 36200 TARE 28.49 31.40 62800 NET EHSL-10-1236 P.0.: 31.40 Ton Gravel Borrow/Type 17 8128 PRODUCT: WEIGHMASTER: \_ DEL. TO: MTL. FRT. ENVIR0 ZONE: HAULER #: 999 TAX TRUCK #: L&L TOTAL RECEIVED BY

969872

NO:



EHSI-10-1236 East Marginal Way Parking Lot

DATE: August 4, 2010

	TONNAGE	SFIPS	30.22	32.92														30.22	32.92	
	TYPE OF	MATERIALS	2 X 4 Rock	Gravel Borrow						i		:						Total Tons	Total Tons	
		DATE	8/4/2010	8/4/201														2 X 4 Rock	Gravel Borro	
	LOCATION		Calportland	Calportland	•															
l I	ESTIMATED	QUANTITY	30.22 ton	32.92 ton																
	LOAD	TIME	9:35 AM	12:08 PM			:							i						
	MANIFEST	#	2810/969920	2810/969944																
	TRUCKING	COMPANY	L & L Transport V	2 L & L Transport																
	LOAD	NO.	1	2	3	4	5	9	7	8	6	10	11	12	13	14	15	16	11	18

NO: 969920 **DELIVERY TICKET PLANT NO.177** Qty. Today: 30.22 Ton 8/4/2010 9:35:56 AM CUSTOMER: 80045 Seattle Aggregate Yard Loads: 1 WYSER CONSTRUCTION, INC. SOLD TO mTON. TON LB 43.84 48.32 ORDER: **GROSS** 96640 2010 PICKED UP PRICES 18.10 16.42 TARE 36200 27.42 30.22 60440 **NET** EHSL-10-1236 ·P.0.: 30.22 Ton 2" x 4" Quarry Spalls PRODUCT: 8520 WEIGHMASTER: \_ DEL. TO: MTL. FRT. ZONE: ENVIRO. HAULER #: 999 TAX TRUCK #: L&L TOTAL RECEIVED BY:

GLACIER NORTHWEST, INC. (206)938 – 6761 NOT DESPONSEN E FOR RANGE POSISSED BY NEXT MARKET PLESS I DEC

**DELIVERY TICKET** 

PLANT NO. 177

969944 NO:

12:08:12 PM 8/4/2010 CUSTOMER: 80045 Seattle Aggregate Yard Loads:

WYSER CONSTRUCTION, INC. SOLD TO:

ORDER: 2010 PICKED UP PRICES

mTON. TON LB 46.28 51.02 GROSS 102040 16.42 18.10 TARE 36200 32.92 29.86 65840 **NET** 

Qty. Today: 32.92 Ton

EHSL-10-1236 P.0.: 8128 PRODUCT:

32.92 Ton

Gravel Borrow/Type 17

WEIGHMASTER: \_

DEL. TO:

ZONE:

HAULER #: 999 TRUCK #: L&L

RECEIVED BY:

MTL. FRT. ENVIRO. TAX TOTAL



EHSI-10-1236 East Marginal Way

Parking Lot

DATE: August 5, 2010

	TRUCKING	MANIFEST	LOAD	ESTIMATED	LOCATION	_	TYPE OF	TONNAGE
	COMPANY	#	ΙI	QUANTITY	:	DATE	S	SLIPS
	H							
	∟ & L Transport V	7809/969887√	10:10 AM	32.38 ton	Calportland	8/5/2010	Gravel Borrow	32.38
	2 L & L Transport	2809/970010√	12:52 PM	29.29 ton	Calportland	8/5/2010	Gravel Borrow	29.29
က								
4								
_								
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_					;			
6				i	:			
10								
_								
12		į						
5			į					
14								
15								
						Gravel Borror	Total Tons	61.67
18								

### NO: **DELIVERY TICKET PLANT NO.177** 8/5/2010 10:10:02 AM Qty. Today: 32.38 Ton CUSTOMER: 80045 Seattle Aggregate Yard Loads: 1 SOLD TO: WYSER CONSTRUCTION, INC. LB TON mTON. ORDER: 50:48 GROSS 100960 45.79 2010 PICKED UP PRICES 18.10 TARE 36200 16.42 29.37 **NET** 64760 32.38 P 0 : EHSL-10-1236 PRODUCT: 8128 Gravel Borrow/Type 17 32.38 Ton DEL. TO: WEIGHMASTER: \_ MTL. ZONE: FRT. HAULER #: 999 ENVIRO. TRUCK #: L&L TAX TOTAL RECEIVED BY: GLACIER NORTHWEST, INC. (206)938 – 6761

970010 NO: **DELIVERY TICKET** Qty. Today: 61.67 Ton PLANT NO.177 CUSTOMER: 80045 Seattle Aggregate Yard Loads: 2 mTONWYSER CONSTRUCTION, INC. 42-99 47.39 SOLD TO: 94780 **GROSS** 16.42 18.10 2010 PICKED UP PRICES 36200 ORDER: TARE 26.57 29.29 58580 NET EHSL-10-1236 29.29 Ton Gravel Borrow/Type 17 P.0.: WEIGHMASTER: \_ 8128 PRODUCT: DEL TO: MTL. FRT. ENVIRO. ZONE: HAULER #: 999 TAX TOTAL TRUCK #: L&L RECEIVED BY



				59.86																
	TONNAGE	SLIPS	30.30	29.56 59.86	32.26		32.01										59.86	64.27		
DATE: August 6, 2010	TYPE OF	MATERIALS	11/4" Minus	11/2" Minus	Gravel Borrow		Gravel Borrow										Total Tons	Total Tons		
DATE: A		DATE	8/6/2010	8/6/2010	8/6/2010		8/6/2010										11/2" Minus	Gravel Borrow		
	LOCATION	:	Calportland	Calportland	Calportland		Calportland													
Parking Lot	ESTIMATED	QUANTITY	30.30 ton	29.56 ton	32.26 ton		32.01 ton													
l Way	LOAD	TIME	7:01 AM	12:04 PM	9:28 AM		9:18 AM													
East Marginal Way	MANIFEST	#	1140/970034	1140/970078	1140/970055		2810/970054													
EHSI-10-1236	TRUCKING	COMPANY	1   Wyser Construction	2 Wyser Construction	3 Wyser Construction		5 L & L Transport 🇸													
	LOAD	NO.	1	2	3	4	5	9	2	8	6	10	11	12	13	14	15	16	17	18

### NO: 970034 **DELIVERY TICKET PLANT NO.177** Qty. Today: 30.30 Ton 8/6/2010 7:01:55 AM CUSTOMER: 80045 Seattle Aggregate Yard Loads: 1 SOLD TO: WYSER CONSTRUCTION, INC. mTON. TON LB ORDER: CROSS 102980 51.49 46.71 2010 PICKED UP PRICES 21.19 19.22 42380 TARE 30.30 60600 27.49 NET EHSI - 10-1236 P.0.: 30.30 Ton PRODUCT: 8545 1 1/4" Minus Quarry Rock WEIGHMASTER: \_ DEL. TO: MTL. FRT. 70NE: ENVIRO. HAULER #: 999 TAX TRUCK #: WYS30 TOTAL

GLACIER HORTHWEST, INC. (206)938-6761

RECEIVED BY:

DELIVERY T	ICKET		NO:	970055
PLANT NO.	177			_
8/6/2010	9:28:50 AM		oday: 64.27	ion
CUSTOMER:	80045 Seattle Aggreg WYSER CONSTRUCTION, INC.	ate Yard L	oads: 2	
SOLD TO:		LB	TON	mTON
ORDER:	FOB 2010 PICKED UP PRICES	GROSS 106900	53 · 45	48 49
	2010 PICKED OF PRICES	TARE 42380	21.19	19.22 29.27
P.O.:	EHSI-10-1236	NET 64520	32.26	29.21
PRODUCT:	8128 Gravel Borrow/T	ype 17	32.26 T	on
DEL. TO:			IGHMASTER: _	
		MTL.		
ZONE:		FRT.		
HAULER #:	999	ENVIRO.		1
TRUCK #:	WY530	TAX		
RECEIVED	BY:			

**DELIVERY TICKET** 

NO:

**PLANT NO.177** 

8/6/2010 12:04:15 PM

Qty. Today: 59.86 Ton

CUSTOMER: 80045 Seattle Aggregate Yard Loads: 2

SOLD TO: WYSER CONSTRUCTION, INC.

LB

59120

mTON.

ORDER:

2010 PICKED UP PRICES

TON **50**.75 GROSS 101500 46-04 TARE 42380 19.22 21.19

P.0.:

EHSI-10-1236

29.56 26.82

PRODUCT:

8545

1 1/4" Minus Quarry Rock

NET

29.56 Ton

DEL. TO:

WEIGHMASTER: \_

ZONE:

HAULER #: 999

RECEIVED BY:

TRUCK #: WYS30

TAX

TOTAL

ENVIRO.

MTL.

FRT.

NO: **DELIVERY TICKET** PLANT NO.177 Qty. Today: 32.01 Ton 8/6/2010 9:18:59 AM CUSTOMER: 80045 Seattle Aggregate Yard Loads: 1 WYSER CONSTRUCTION, INC. SOLD TO: mTON LB TON ORDER: 50.11 45.46 GROSS 100220 2010 PICKED UP PRICES 36200 18.10 16.42 TARE 64020 32.01 29.04 NET EHS[-10-1236 P.0. 32.01 Ton Gravel Borrow/Type 17 PRODUCT: 8128 WEIGHMASTER: \_ DEL. TO: MTL. FRT. ZONE: ENVIRO. HAULER #: 999 TAX TRUCK #: L&L TOTAL RECEIVED BY



EHSI-10-1236 East

East Marginal Way

**Parking Lot** 

DATE: August 16, 2010

				63.06																
TONNAGE	SLIPS		32.26	30.80 63.06		31.94	33.37	31.06				-					63.06	96.37		
TYPE OF	MATERIALS		11/4" Minus	11/1" Minus		Gravel Borrorw	Gravel Borrorw	Gravel Borronw		!							Total Tons	Total Tons		
	DATE		8/16/2010	8/16/2010		8/16/2010	8/16/2010	8/16/2010									11/4" Minus	Gravel Borrow		
LOCATION		:	Calportland	Calportland		Calportland	Calportland	Calportland												
ESTIMATED	QUANTITY		32.26 ton	30.80 ton		31.94 ton	33.37 ton	31.06 ton												
LOAD	TIME		11:59 AM	2:16 PM		9:27 AM	11:41 AM	2:09 PM												
MANIFEST	*	1	1146/970476	1146/970498√		2815/970466	2815/970473	2815/970496v												
TRUCKING	COMPANY		1 Wyser Construction	2 Wyser Construction		4 L & L Transport	5 L & L Transport	6 L & L Transport												
LOAD	ON			2	က	4	5	9	7	8	6	10	11	12	13	14	15	16	17	18

### 970476 NO: **DELIVERY TICKET** PLANT NO 177 Qty. Today: 32.26 Ton 8/16/2010 11:59:19 AM CUSTOMER: 80045 Seattle Aggregate Yard Loads: 1 WYSER CONSTRUCTION, INC. SOLD TO: mTON. TON LB 53.29 48.34 ORDER: GROSS 106580 2010 PICKED UP PRICES 19.08 42060 21.03 TARE 29.27 32.26 64520 NET EHSI-10-1236 P.0.: 32.26 Ton 1 1/4" Minus Quarry Rock PRODUCT: 8545 WE! CHMASTER: \_ DEL. TO: MTL FRT. ZONE: ENVIRO. HAULER #: 999 TAX TRUCK #: WYS30 TOTAL

GLACIER NORTHWEST, INC. (206)938 - 6761

RECEIVED BY: \_

970498 NO: **DELIVERY TICKET PLANT NO. 177** Qty. Today: 63.06 Ton 8/16/2010 2:16:52 PM CUSTOMER: 80045 Seattle Aggregate Yard Loads: WYSER CONSTRUCTION, INC. SOLD TO: mTON. LB TON ORDER: GROSS 103660 51.83 47.02 2010 PICKED UP PRICES 19.08 TARE 42060 21.03 27.94 61600 30.80 NET EHSI-10-1236 P.0.: 30.80 Ton 1 1/4" Minus Quarry Rock PRODUCT: 8545 WEIGHMASTER: \_ DEL. TO: MTL. FRT. ZONE: ENVIRO. HAULER #: 999 TAX TRUCK #: WYS30 TOTAL RECEIVED BY:

NO: 970466 **DELIVERY TICKET** PLANT NO.177 8/16/2010 9:27:49 AM Qty. Today: 31.94 Ton CUSTOMER: 80045 Seattle Aggregate Yard Loads: 1 WYSER CONSTRUCTION, INC. SOLD TO: LB TON mTON. ORDER: **FOB** GROSS 100080 50.04 45.40 2010 PICKED UP PRICES TARE 36200 18.10 16.42 63880 28.98 NET 31.94 P.0.: EHSL-10-1236 PRODUCT: 8128 Gravel Borrow/Type 17 31.94 Ton DEL. TO: WEIGHMASTER: MTL. ZONE: FRT. HAULER #: 999 ENVIRO. TRUCK #: L&L TAX TOTAL RECEIVED BY:

> GLACIER MORTHWEST, INC. (206)938 - 6761 MOT RESPONSED F FOR DAMAGE CAUSED BY DELDRED MISSON CHEEK MESON

**DELIVERY TICKET** 

PLANT NO.177

8/16/2010 11:41:56 AM

NO:

Qty. Today: 65.31 Ton

CUSTOMER: 80045 Seattle Aggregate Yard Loads: 2 SOLD TO: WYSER CONSTRUCTION, INC.

ORDER:

F0B

2010 PICKED UP PRICES

LB TON mTON GROSS 102940 51.47 46.69-1 TARE 36200 18.10 16.42 NET 66740 33.37 30.27

P.O.:

EHSL-10-1236

33.37 **30**.2

PRODUCT:

8128

Gravel Borrow/Type 17

33,37 Ton

DEL. TO:

--

WEIGHMASTER:

ZONE:

HAULER #: 999 TRUCK #: L&L MTL. FRT. ENVIRO. TAX TOTAL

RECEIVED BY

GLACIER NORTHWEST, INC. (206)938 - 6761 NOT RESPONSING FROD DAMAGE CHIEFO BY DELINERY MISTOR CHIEF INC.

**DELIVERY TICKET** PLANT NO. 177 Qty. Today: 96.37 Ton 8/16/2010 2:09:20 PM CUSTOMER: 80045 Seattle Aggregate Yard Loads: 3 SOLD TO: WYSER CONSTRUCTION, INC. TON mTON LB ORDER: 98320 49.16 44.60 **GROSS** 2010 PICKED UP PRICES 16.42 TARE 36200 18.10 31.06 28.18 NET 62120 EHSI-10-1236 P.0.: 31.06 Ton 8128 Gravel Borrow/Type 17 PRODUCT: WEIGHMASTER: \_ DEL. TO: MTL. FRT. ZONE:

NO:

970496

GLACIER NORTHWEST, INC. (206)938 – 6761 MAI DESPONSE FLOR DAMAGE CHIEFE BY DES HEREY MESTE CHIEF (AND

ENVIRO. TAX

TOTAL

HAULER #: 999

TRUCK #: L&L

RECEIVED BY:



EHSI-10-1236 East Marginal Way

y Parking Lot

DATE: August 17, 2010

		31.01				91.25													
TONNAGE	SLIPS	31.01 31.01		30.23	31.43	29.59 91.25										122.26			
TYPE OF	MATERIALS	Gravel Borrow		Gravel Borrow	Gravel Borrow	Gravel Borrow										Total Tons			
	DATE	8/17/2010		8/17/2010	8/17/2010	8/17/2010										Gravel Borro			
LOCATION		Calportland		Calportland	Calportland	Calportiand													
ESTIMATED	QUANTITY	31.01 ton		30.23 ton	31.43 ton	29.59 TON									,				
LOAD	TIME	7:28 AM		9:31 AM	11:47 AM	2:08 PM													
MANIFEST	#	1142/970510		2816/970533	2816/970555	2816/970574													
TRUCKING	COMPANY	1 Wyser Construction		3 L & L Transport	4 L & L Transport	5 L & L Transport										,			
LOAD	NO.	1	2	e	4	5	9	7	8	6	10	11	12	13	14	15	16	17	18

**DELIVERY TICKET** 

NO: 970510

PLANT NO.177

8/17/2010 7:28:18 AM

Qty. Today: 31.01 Ton

CUSTOMER: 80045 Seattle Aggregate Yard Loads: 1

SOLD TO:

WYSER CONSTRUCTION, INC.

ORDER:

F0B

8128

2010 PICKED UP PRICES

mTON TON LB 47 31 GROSS 104300 <del>52.</del> 15 19.18 21.14 TARE 42280 31.01 28.13 62020 NET

P.0.:

EHSI-10-1236

Gravel Borrow/Type 17

31.01 Ton

PRODUCT: DEL. TO:

WEIGHMASTER: \_\_\_

ZONE:

HAULER #: 999

TRUCK #: WYS30

MTL. FRT.

ENVIRO.

TAX TOTAL

RECEIVED BY:

NO: **DELIVERY TICKET** PLANT NO.177 8/17/2010 9:31:28 AM Qty. Today: 61.24 Ton CUSTOMER: 80045 Seattle Aggregate Yard Loads: 2 SOLD TO: WYSER CONSTRUCTION, INC. LB TON mTON. ORDER: F0B **GROSS** 96660-48.33 43.84 2010 PICKED UP PRICES TARE 36200 16.42 18.10 NET 60460 30.23 27.42 P.0. EHSI-10-1236 PRODUCT: 8128 Gravel Borrow/Type 17 30.23 Ton DEL. TO: WEIGHMASTER: MTL. ZONE: FRT. HAULER #: 999 ENVIRO. TRUCK #: L&L TAX TOTAL RECEIVED BY:

GLACIER MORTHWEST, INC. (206)938-6761

NO: 970555 **DELIVERY TICKET PLANT NO.177** Qty. Today: 92.67 Ton 8/17/2010 11:47:08 AM CUSTOMER: 80045 Seattle Aggregate Yard Loads: 3 SOLD TO: WYSER CONSTRUCTION, INC. LB TON mTON ORDER: **GROSS** 99060 49.53 44.93 2010 PICKED UP PRICES TARE 36200 18.10 16.42 NET 62860 31.43 28.51 P.0.: EHSI-10-1236 PRODUCT: 8128 Gravel Borrow/Type 17 31.43 Ton DEL. TO: WEIGHMASTER: MTL. ZONE: FRT. HAULER #: 999 ENVIRO. TRUCK #: L&L TAX TOTAL RECEIVED BY:

**DELIVERY TICKET** NO: 970574 **PLANT NO. 177** 8/17/2010 2:08:52 PM Qty. Today: 122.26 Ton CUSTOMER: 80045 Seattle Aggregate Yard Loads: SOLD TO: WYSER CONSTRUCTION, INC. ORDER: LB TON F<sub>0</sub>B mTON. **GROSS** 2010 PICKED UP PRICES 95380 47.69 43.26 TARE 36200 18.10 16.42 NET P.0, : 59180 29.59 EHSI-10-1236 26.84 PRODUCT: 8128 Gravel Borrow/Type 17 29.59 Ton DEL. TO: WEIGHMASTER: MTL. ZONE: FRT. HAULER #: 999 ENVIRO. TRUCK #: L&L TAX TOTAL RECEIVED BY:



Parking Lot
East Marginal Way
EHSI-10-1236

DATE: August 18, 2010

TRUCKING MANIFEST COMPANY #	LOAD	ESTIMATED	LOCATION	DATE	TYPE OF MATERIALS	TONNAGE
1 Wyser Construction 1144/970618v 9:	9:18 AM	14.78 ton	Calportland	8/18/2010	2" x 4" Quarry	14.78
1144/970645	11:28 AM	14.87 ton	Calportland	8/18/2010	_	14.87 29.65
3 Wyser Construction   1144/970666√ 2:	2:04 PM	14.46 ton	Calportland	8/18/2010	Gravel Borrow	14.46 14.46
√ 2817/970615	9:16 AM	30.21 ton	Calportland	8/18/2010	Gravel Borrow	30.21
6 L & L Transport   2817/970647   11.	11:33 AM	30.80 ton	Calportland	8/18/2010		30.80
7 L & L Transport 2817/970668 2:2	2:21 PM	29.73 ton	Calportland	8/18/2010	<u> </u>	29.73 90.74
				2" x 4" Quarry	Total Tons	29.65
				Gravel Borro	Total Tons	105.20

### NO: **DELIVERY TICKET** 970618 **PLANT NO.177** 8/18/2010 9:18:56 AM Qty. Today: 14.78 Ton CUSTOMER: 80045 Seattle Aggregate Yard Loads: 1 SOLD TO: WYSER CONSTRUCTION, INC. LB TON ORDER: mTON. **GROSS** 55920 27.96 25.36 2010 PICKED UP PRICES TARE 26360 13.18 11.96 NET 29560 14.78 13.41 P.O.: EHSI-10-1236 PRODUCT: 8520 2" x 4" Quarry Spalls 14.78 Ton DEL. TO: WEIGHMASTER: MTL. ZONF: FRT. HAULER #: 999 ENVIRO. TRUCK #: WYS30S TAX TOTAL RECEIVED BY:

GLACIER NORTHWEST, INC. (206)938-6761

**DELIVERY TICKET** NO: 970645 PLANT NO.177 8/18/2010 11:28:29 AM Qty. Today: 29.65 Ton CUSTOMER: 80045 Seattle Aggregate Yard Loads: 2 SOLD TO: WYSER CONSTRUCTION, INC. ORDER: F<sub>0</sub>B LB TON **mTON** 2010 PICKED UP PRICES **CROSS** 56100 28.05 25-45 TARE 26360 13.18 11.96 P.0: EHSI-10-1236 NET 29740 14.87 13,49 PRODUCT: 8520 2" x 4" Quarry Spalls 14.87 Ton DEL. TO: WEIGHMASTER: MTL. ZONE: HAULER #: 999 FRT ENVIRO. TRUCK #: WYS30S TAX RECEIVED BY: TOTAL

**DELIVERY TICKET** PLANT NO.177 8/18/2010 2:04:02 PM

Qty. Today: 75.47 Ton

NO:

CUSTOMER: 80045 Seattle Aggregate Yard Loads: 3

WYSER CONSTRUCTION, INC. SOLD TO:

ORDER:

2010 PICKED UP PRICES

mTON. LB TON 25.07 27:64 55280 **GROSS** 11.96 13.18 26360 TARE 13.12 14.46 28920 NET

EHSI-10-1236 P.0.:

Gravel Borrow/Type 17 8128

14.46 Ton

970666

PRODUCT: DEL. TO:

WEIGHMASTER: \_

ZONE:

HAULER #: 999 TRUCK #: WYS305

RECEIVED BY: \_

MTL. FRT ENVIRO. T/X TOTAL.

NO: **DELIVERY TICKET** PLANT NO.177 Qty. Today: 30.21 Ton 8/18/2010 9:16:18 AM CUSTOMER: 80045 Seattle Aggregate Yard Loads: 1 WYSER CONSTRUCTION, INC. mTON. TON SOLD TO: LB 48.31 43.83 96620 GROSS ORDER: 2010 PICKED UP PRICES 18.10 16.42 36200 TARE 27.41 30.21 60420 NET EHSI-10-1236 P.0.: 30.21 Ton Gravel Borrow/Type 17 8128 PRODUCT: WEIGHMASTER: \_ DEL. TO: MTL. FRT. ZONE: ENVIRO. HAULER #: 999 TAX TRUCK #: L&L TOTAL RECEIVED BY ■ GLACIER NORTHWEST, INC. (206)938-6761

970615

NO: 970647 **DELIVERY TICKET** PLANT NO.177 Qty. Today: 61.01 Ton 8/18/2010 11:33:48 AM CUSTOMER: 80045 Seattle Aggregate Yard Loads: 2 WYSER CONSTRUCTION, INC. SOLD TO: mTONLB TON ORDER: **GROSS** 97820 148-90° 44-36 2010 PICKED UP PRICES 18.10 16.42 TARE 36200 30.80 27.94 NET 61600 EHSI-10-1236 P.O.: 30.80 Ton Gravel Borrow/Type 17 PRODUCT: 8128 WEIGHMASTER: \_\_ DEL. TO: MTL. FRT. ZONE: ENVIRO. HAULER #: 999 TAX TRUCK #: L&L **TOTAL** 

GLACIER #10RTHWEST, INC. (206)938 - 6761

RECEIVED BY:

**DELIVERY TICKET** NO: 970668 PLANT NO. 177 8/18/2010 2:21:38 PM Qty. Today:105.20 Ton CUSTOMER: 80045 Seattle Aggregate Yard Loads: 4
SOLD TO: WYSER CONSTRUCTION, INC. ORDER: LB TON F<sub>0</sub>B mTON. **GROSS** 2010 PICKED UP PRICES 95660 47.83 43.39 TARE 36200 18.10 16.42 NET P.O.: EHSI-10-1236 59460 29.73 26.97 PRODUCT: 8128 Gravel Borrow/Type 17 29.73 Ton DEL. TO: WEIGHMASTER: \_ MIL. ZONE: FF,T. HAULER #: 999 ENVIRO. TAX TOTAL RECEIVED BY



EHSI-10-1236 East Marginal Way Parking Lot

DATE: August 19, 2010

LOAD	TRUCKING	MANIFEST	LOAD	LOAD ESTIMATED	LOCATION		TYPE OF	TONNAGE
9	COMPANY	#	TIME	QUANTITY		DATE	MATERIALS	SLIPS
,								
	1 L & L Transport	2818/970695	9:07 AM	30.56 ton	Calportland	8/19/2010	Gravel Borrow	30.56
2	2 L & L Transport	2818/970714	11:24 AM	29.83 ton	Calportland	8/19/2010	Gravel Borrow	29.83
က	3 L & t Transport	2818/970733	1:57 PM	30.71 ton	Calportland	8/19/2010		30.71
4								
5								
9			:					
7								
8					į			
6								
10								
11								-
12								
13								
14								
15						Gravel Borro	Total Tons	91.10
16								
17								
18								

### NO: **DELIVERY TICKET PLANT NO.177** 8/19/2010 9:07:47 AM Qty. Today: 30.56 Ton CUSTOMER: 80045 Seattle Aggregate Yard Loads: 1 SOLD TO: WYSER CONSTRUCTION, INC. LB TON mTON ORDER: **GROSS** 97320 48.66 44.14 2010 PICKED UP PRICES 16.42 TARE 36200 18.10 NET 61120 30.56 27.72 P.0. EHSI-10-1236 PRODUCT: Gravel Borrow/Type 17 30.56 Ton 8128 DEL. TO: WEIGHMASTER: \_ MTL. ZONE: FRT. HAULER #: 999 ENVIRO. TRUCK 4: L&L TAX TOTAL BY نے RECE

GLACIER NORTHWEST, INC. (206)938-6761

DELIVERY 1				NO:	970714
	177 11:24:14 AM 80045 Seattle Aggre WYSER CONSTRUCTION, INC	mata V.	Qty Toda	ay: 60/39 ds: 2	Fon-
ORDER:	FOB 2010 PICKED UP PRICES	GROSS TARE	LB 95860 36200	TON 47:93 18:10	mTON 43.48- 16.42
P.O.: PRODUCT: DEL. TO:	EHSI-10-1236 8128 Gravel Borrow/T		59660	29.83 29.83 To	27.06 on
TOUALS IN	L&L	MTL. FRT. ENVIF TAX TOTAL	RO.	MASTER:	

NO: **DELIVERY TICKET PLANT NO.177** 8/19/2010 1:57:45 PM Qty. Today: 91.10 Ton CUSTOMER: 80045 Seattle Aggregate Yard Loads: 3 SOLD TO: WYSER CONSTRUCTION, INC. LB TON mTON. ORDER: 97620 44.28 **GROSS** 48.81 2010 PICKED UP PRICES TARE 36200 18.10 16.42 30.71 NET 61420 27.86 P.0.: EHSI-10-1236 PRODUCT: 8128 Gravel Borrow/Type 17 30.71 Ton DEL. TO: WEIGHMASTER: MTL. FRT. ZONE: HAULER #: 999 ENVIRO. TRUCK #: L&L TAX TOTAL

GLACIER NORTHWEST, INC. (206)938-6761

RECELL\_D BY:



## IMPORT MATERIALS LOG

EHSI-10-1236 Ea

East Marginal Way

Parking Lot

DATE: August 20, 2010

		30.98	30.37																
TONNAGE	SLIPS	30.98 30.98	30.37 30.37													30.98	30.37		
TYPE OF	MATERIALS	Gravel Borrow	2" X 4" Quarry													Total Tons	Total Tons		
	DATE	8/20/2010	8/20/2010													Gravel Borro	2" X 4" Quarry		
LOCATION		Calportland	Calportland																
ESTIMATED	QUANTITY	30.98 ton	30.37 ton																
LOAD	TIME	9:06 AM	11:34 AM																
MANIFEST	*	2819/970768	2819/970787																
TRUCKING	COMPANY	1 L & L Transport	2 L & L Transport																
LOAD	NO.		2	3	4	5	9	7	8	6	10	11	12	13	14	15	16	17	18

NO: **DELIVERY TICKET** PLANT NO.177 8/20/2010 11:34:11 AM Qty. Today: 30.37 Ton CUSTOMER: 80045 Seattle Aggregate Yard Loads: 1 WYSER CONSTRUCTION, INC. SOLD TO: mTON LB TON ORDER: F<sub>0</sub>B **GROSS** 96940 48-47 43..97-2010 PICKED UP PRICES TARE 36200 18.10 16.42 NET 60740 30.37 27.55 P.0.: EHSI-10-1236 2" x 4" Quarry Spalls PRODUCT: 8520 30.37 Ton DEL. TO: WEIGHMASTER: MTL. ZONE: FRT. HAULER #: 999 ENVIRO. TRUCK #: L&L TAX TOTAL RECEIVED BY:

GLACIER NORTHWEST, INC. (206)938-6761

**PLANT NO. 177** Qtv. Today: 30.98 Ton 8/20/2010 9:06:11 AM CUSTOMER: 80045 Seattle Aggregate Yard Loads: 1 WYSER CONSTRUCTION, INC. SOLD TO: mTON. TON LB 44 52 49.08 F<sub>0</sub>B ORDER: 98160 GROSS 2010 PICKED UP PRICES 16.42 18.10 36200 TARE 30.98 28.10 61960 **NET** EHSI-10-1236 P.0.: 30.98 Ton Gravel Borrow/Type 17 8128 PRODUCT: WEIGHMASTER: \_\_ DEL. TO:

ZONE:

HAULER #: 999 TRUCK #: L&L

RECEIVED BY:

**DELIVERY TICKET** 

MTL. FRT. ENVIRO. TAX TOTAL

970768

NO:



## IMPORT MATERIALS LOG

EHSI-10-1236 East Marginal Way Parking Lot

**DATE:** August 23, 2010

				76.21							198.23								
TONNAGE	SLIPS	30.93	29.98	15.30 76.21	31.09	14.67	30.67	31.24	30.87	29.47	30.22 198.23						76.21	198.23	
TYPE OF	MATERIALS	2" X 4" Quarry	2" X 4" Quarry	2" X 4" Quarry	Gravel Borrow						Total Tons	Total Tons							
	DATE	8/23/2010	8/23/2010	8/23/2010	8/23/2010	8/23/2010	8/23/2010	8/23/2010	8/23/2010	8/23/2010	8/23/2010						2" X 4" Quarr	Gravel Borro	
LOCATION		Calportland	Calportland	Calportland	Calportland	Calportland	Calportland	Calportland	Calportland	Calportland	Calportland							)	
ESTIMATED	QUANTITY	30.93 ton	29.98 ton	15.30 ton	31.09 ton	14.67 ton	30.67 ton	31.24 ton	30.87 ton	29.47 ton	30.22 ton								
LOAD	TIME	7:03 AM	7:39 AM	8:57 AM	8:13 AM	8:50 AM	9:36 AM	10:40 AM	11:48 AM	12:21 PM	12:58 PM								
MANIFEST	*	2820/970817	2820/970819	2820/970830	2820/970823	2820/970828	2820/970843	2820/970852	2820/970863	2820/970867	2820/970877								
TRUCKING	COMPANY	L & L Transport	2 L & L Transport	3 L & L Transport	4 L & L Transport	5 L & L Transport	6 L & L Transport	7 L & L Transport	8 L & L Transport	9 L & L Transport	10 L & L Transport								
LOAD	NO.	7	2	က	4	2	9	7	Φ	တ	10	11	12	13	14	15	16	17	18

970817 NO: **DELIVERY TICKET PLANT NO.177** Qty. Today: 30.93 Ton 8/23/2010 7:03:16 AM CUSTOMER: 80045 Seattle Aggregate Yard Loads: WYSER CONSTRUCTION, INC. SOLD TO: TON mTON. LB ORDER: 98060 49.03 44.48 **CROSS** 2010 PICKED UP PRICES 36200 18.10 16.42 TARE 28.06 61860 30.93 NET EHSI-10-1236 P.0.: 30.93 Ton 2" x 4" Quarry Spalls 8520 PRODUCT: WEIGHMASTER: DEL. TO: MTL. FRT. ZONE: ENVIRO. HAULER #: 999 TAX TRUCK #: L&L

GLACIER NORTHWEST, INC. (206)938-6761

RECEIVED BY

TOTAL

970819 NO: **DELIVERY TICKET PLANT NO. 177** Qty. Today: 60.91 Ton 8/23/2010 7:39:46 AM CUSTOMER: 80045 Seattle Aggregate Yard Loads: 2 WYSER CONSTRUCTION, INC. SOLD TO: **mTON** LB TON ORDER: 48.08 43.62 96160 GROSS-2010 PICKED UP PRICES 16.42 36200 18.10 TARE 27.20 29.98 NET 59960 EHSI-10-1236 P 0 : 29.98 Ton 2" x 4" Quarry Spalls 8520 PRODUCT: WEIGHMASTER: \_ DEL. TO: MTL. FRT. ZONE: ENVIRO. HAULER #: 999 TAX TRUCK #: L&L TOTAL RECEIVED BY

NO: **DELIVERY TICKET** 970830 PLANT NO.177 8/23/2010 8:57:46 AM Qty. Today: 76.21 Ton CUSTOMER: 80045 Seattle Aggregate Yard Loads: 3 SOLD TO: WYSER CONSTRUCTION, INC. LB TON mTON. ORDER: **FOB CROSS** 96140 48.07 43.61 2010 PICKED UP PRICES TARE 65540 32.77 29.73 NET 30600 15.30 13.88 P.0.: EHSI-10-1236 PRODUCT 8520 2" x 4" Quarry Spalls 15.30 Ton DEL. TO: WEIGHMASTER: MTL. ZONE: FRT. HAULER #: 999 ENVIRO. TRUCK #: L&L TAX TOTAL RECEIVED BY:

GLACIER NORTHWEST, INC. (206)938-6761

NO: 970823 **DELIVERY TICKET** PLANT NO. 177 8/23/2010 8:13:57 AM Qty. Today: 31.09 Ton CUSTOMER: 80045 Seattle Aggregate Yard Loads: 1 SOLD TO: WYSER CONSTRUCTION, INC. LB TON mTON. ORDER: **GROSS** 98380 49.19 44-62 2010 PICKED UP PRICES TARE 36200 18.10 16.42 NET 62180 31.09 28.20 P.O.: EHSI-10-1236 PRODUCT: 8128 Gravel Borrow/Type 17 31.09 Ton DEL. TO: WEIGHMASTER: \_ MTL. ZONE: FRT. HAULER #: 999 ENVIRO. TRUCK #: L&L TAX TOTAL RECEIVED BY

NO: **DELIVERY TICKET PLANT NO.177** Qtv. Today: 45.76 Ton-8/23/2010 8:50:33 AM CUSTOMER: 80045 Seattle Aggregate Yard Loads: 2 SOLD TO: WYSER CONSTRUCTION, INC. LB TON mTON. ORDER: FOB 65540 32.77 29..73-GROSS 2010 PICKED UP PRICES TARE 36200 18.10 16.42 14.67 13.31 NET 29340 EHSI-10-1236 P.0.: 14.67 Ton PRODUCT: 8128 Gravel Borrow/Type 17 WEIGHMASTER: DEL. TO: MTL. ZONE: FRT. ENVIRO. HAULER #: 999 TRUCK #: L&L TAX TOTAL RECEIVED BY:

**GLACIER NORTHWEST, INC. (206)938 – 6761** 

**DELIVERY TICKET** NO: **PLANT NO.177** 8/23/2010 9:36:27 AM Qty. Today: 76.43 Ton CUSTOMER: 80045 Seattle Aggregate Yard Loads: SOLD TO: WYSER CONSTRUCTION, INC. LB TON mTON ORDER: **GROSS** 97540-48-77 44-24 2010 PICKED UP PRICES TARE 36200 18.10 16.42 NET 61340 30.67 27.82 P.0.: EHSI-10-1236 PRODUCT: 8128 Gravel Borrow/Type 17 30.67 Ton DEL. TO: WE I CHMASTER: MTL. ZONE: FRT. HAULER #: 999 ENVIRO. TRUCK #: L&L TAX TOTAL RECEIVED BY:

### 970852 NO: **DELIVERY TICKET** PLANT NO.177 Qty. Today: 107.67 Ton 8/23/2010 10:40:21 AM CUSTOMER: 80045 Seattle Aggregate Yard Loads: 4 SOLD TO: WYSER CONSTRUCTION, INC. LB TON mTON. ORDER: **FOB GROSS** 98680 49.34 44.76 2010 PICKED UP PRICES TARE 36200 18.10 16.42 NET 62480 31.24 28.34 EHSI-10-1236 P.0.+ 31.24 Ton PRODUCT: 8128 Gravel Borrow/Type 17 DEL. TO: WEIGHMASTER: MTL. FRT. ZONE: HAULER #: 999 ENVIRO. TRUCK #: L&L TAX TOTAL

**GLACIER MORTHWEST, INC. (206)938-6761** 

RECEIVED BY:

DELIVERY 1 PLANT NO.				NO:	970863
8/23/2010	0 11:48:36 AM 80045 Seattle Aggre WYSER CONSTRUCTION, INC	gate \		ay:138,54 ds: 5	Ton
ORDER:	FOB 2010 PICKED UP PRICES	GROSS TARE	LB 97940 36200	TON 48.97 18.10	mTON 44.42 16.42
P.O.:	EHSI-10-1236	NET	61740	30.87	28.00
PRODUCT:	8128 Gravel Borrow/	ype 17		30.87 To	on
DEL. TO:			WEIGH	IMASTER: _	
ZONE: HAULER #: TRUCK #: RECEIVED E	L&L	MTL FRT ENV TAX TOT	iRO.		

### NO: **DELIVERY TICKET** 970867 **PLANT NO. 177** 8/23/2010 12:21:05 PM Qty. Today: 168.01 Ton CUSTOMER: 80045 Seattle Aggregate Yard Loads: 6 SOLD TO: WYSER CONSTRUCTION, INC. LB TON mTON. ORDER: F<sub>0</sub>B **GROSS** 95140 47.57 43.15 2010 PICKED UP PRICES TARE 36200 18.10 16.42 NET 58940 29.47 26.73 P.0.: EHSI-10-1236 PRODUCT: 8128 Gravel Borrow/Type 17 29.47 Ton DEL. TO: WEIGHMASTER: MTL. ZONE: FRT. HAULER #: 999 ENVIRO. TRUCK #: L&L TAX TOTAL RECEIVED BY: GLACIER HORTHWEST, INC. (206)938-6761 970877 NO: DELIVERY TICKET PLANT NO.177 Qty. Today: 198.23 Ton 8/23/2010 12:58:24 PM CUSTOMER: 80045 Seattle Aggregate Yard Loads: 7 WYSER CONSTRUCTION, INC. mTON. TON SOLD TO: LB 48.32 43-84-96640 GROSS. ORDER: 2010 PICKED UP PRICES 16.42 18.10 36200 TARE 27.42 30.22 60440 NET EHSI-10-1236 P.0.: 30.22 Ton Gravel Borrow/Type 17 8128 PRODUCT: WEIGHMASTER: \_ DEL. TO: MTL. FRT.

GLACIER MORTHWEST, INC. (206)938-6761

ENVIRO.

TAX

TOTAL

ZONE:

HAULER #: 999

TRUCK #: L&L

RECEIVED BY:



## IMPORT MATERIALS LOG

				61.41	33.43															
0	TONNAGE	SLIPS	30.91	30.50 61.41	33.43 33.43													61.41	33.43	
DATE: August 24, 2010	TYPE OF	MATERIALS	Gravel Borrow	Gravel Borrow	11/1" Minus													Total Tons	Total Tons	
DATE: A		DATE	8/24/2010	8/24/2010	8/24/2010													Gravel Borror	11/2" Minus	
	LOCATION		Calportland	Calportland	Calportland													)		
Parking Lot	ESTIMATED	QUANTITY	30.91 ton	30.50 ton	33.43 ton															
l Way	LOAD	TIME	10:06 AM	10:42 AM	1:35 PM															
East Marginal Way	MANIFEST	#	2821/970916	2821/970920	2821/970946					-										
EHSI-10-1236	TRUCKING	COMPANY	1 L & L Transport	2 L & L Transport	3 L & L Transport															
	LOAD	NO.	1	2	က	4	5	9	7	8	6	10	11	12	13	14	15	16	17	18

### NO: 970916 **DELIVERY TICKET PLANT NO.177** Qty. Today: 30.91 Ton 8/24/2010 10:06:58 AM CUSTOMER: 80045 Seattle Aggregate Yard Loads: 1 WYSER CONSTRUCTION, INC., SOLD TO: mTON. LB TON ORDER: **GROSS** 98020 49.01 44:46 2010 PICKED UP PRICES TARE 36200 18.10 16.42 61820 30.91 28.04 NET EHSI-10-1236 P.0.: 30.91 Ton Gravel Borrow/Type 17 PRODUCT: 8128 WEIGHMASTER: \_ DEL. TO: MTL. FRT. ZONE: ENVIRO. HAULER #: 999 TAX TRUCK #: L&L TOTAL RECEIVED BY:

GLACIER NORTHWEST, INC. (206)938 - 6761

<b>DELIVERY</b>	TICKET		NO:	970920
PLANT NO.	177			
8/24/2016	10:42:51 AM	Qty. Toda	y: 61.41	Ton
CUSTOMER: SOLD TO:	80045 Seattle Aggregate WYSER CONSTRUCTION, INC.	_	-	
ORDER:	FOB 2010 PICKED UP PRICES GROTARI		TON 48:60 18:10	mTON 44.39 16.42
P.O.:	EHSI-10-1236 NET	61000	30.50	27.67
PRODUCT:	8128 Gravel Borrow/Type	17	30.50 T	on
DEL. TO:		WEIGHM	IASTER: _	
ZONE: HAULER #: TRUCK #:	999 L&L			
RECEIVED	3)	UTAL		

NO: **DELIVERY TICKET PLANT NO.177** 8/24/2010 1:35:29 PM Qty. Today: 33.43 Ton CUSTOMER: 80045 Seattle Aggregate Yard Loads: 1 SOLD TO: WYSER CONSTRUCTION, INC., LB TON mTON. ORDER: GROSS 103060 51.53 46.75 2010 PICKED UP PRICES TARE 36200 18.10 16.42 NET 66860 33.43 30.33 P.0. EHSI-10-1236 PRODUCT: 1 1/4" Minus Quarry Rock 8545 33.43 Ton DEL. TO: WEIGHMASTER: MTL. ZONE: FRT. HAULER #: 999 ENVIRO. TRUCK #: L&L TAX **TOTAL** RECEIVED BY

				EHS - International
APPENDIX C: CO	ONTAMINATED	WATER DI	SPOSAL BI	LLS OF LADING

### STRAIGHT BILL OF LADING ORIGINAL - NOT NEGOTIABLE

Shipper No. Ub/83

MARINE VACUUM SEI	RVICE INC.
-------------------	------------

Carrier No.

	Outrier 1101
RINE VACUUM SERVICE INC.	8 11-10

							Date	016 ()	
age	of			(Name of	carrier)	(SCAC)			
n Collect  O: Consig	MARINE	VACUUM SERVAHAM ST.		ed in Item 430, Sec.1.	Shipper Wyser  Street 4764  City See Ho		TTWAZ	Wy . Zip Code	
City	SEATTLE	State, WA	Zip Code	98108	24 hr. Emergency Conta	800	)-540-74	91	
							Veh	icle	

City SEATTL		State,	AAV	Zip (	Code		24 hr. Emergency	Contact	Tel. No.	00-540	J-1-40 I		
Route											Vehicle Number		
No. of Units & Container Type	НМ	Proper UN or	Shipping Name, r NA Number, Pa	BASIC Hazard Class acking Group	DESCRIPTION UN or NA No or Haza	<b>N</b> umber, Prop ard Class, P	per Shipping Name, acking Group	TO	TAL QUANTITY Weight, Volume, Gallons, etc.)	(Sub	iGHT oject to rection)	RATE	CHARGES (For Carrier Use Only)
W		NOW.	-RECWL	ATED	WASTE	5 h	ATER	3	3000	Gal	10-		
			•										
				10									
							7						

### PLACARDS TENDERED: YES - NO -I hereby declare that the contents of this

Note — (1) Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property, as follows: "The agreed or declared value of the property is hereby specifically stated by the shipper to per (2) Where the applicable tariff provisions specify a limitation of the carrier's liability absent a release or a value declaration by the shipper and the shipper does not release the carrier's liability or declare a value, the carrier's liability shall be limited to the extent provided by such provisions. See NMFC them 172. (3) Commodities requiring special or additional care or attention in handling or stowing must be so marked and packaged as to ensure safe transportation. See Section 2(e) of them 360, Bills of Lading, Freight Bills and Statements of Charges and Section 1(a) of the Contract Terms and Conditions for a list of such articles.

I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

REMIT C.O.D. TO: ADDRESS

COD

Amt: \$

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the collowing statement:

The carrier shall not make delivery of this shipment without payment of reight and all other lawful charges.

C.O.D. FEE: PREPAID 
COLLECT TOTAL CHARGES

\$

FREIGHT CHARGES

FREIGHT C FREIGHT PREPAID except when box at right is checked

Check box if ch

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually carried as to each carrier of all or any of said property over all or any portion of said droute to destination.

tination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.

Shipper hereby certifies that he is familiar with all the lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

ally agreed as to each carrier of all or any or, said property over all or any portion of said foule to des-	
HIPPER	CARRIER MARINE VACUUM SERVICE INC.
ER X SKST	PER Saha Para
	DATE R-11-70

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## STRAIGHT BILL OF LADING ORIGINAL — NOT NEGOTIABLE

Shipper No.	06779
	*
Carrier No.	

			N	MARINE	VACUUN	A SERVICE IN	IC.	ounci ivo	81	6-10
Page c	of				(Name of c	carrier)	(SCAC)	Date _	0110	0-10
On Collect on Delivery shipm TO: Consignee MA			before consignee's name or a		in Item 430, Sec.1.	FROM: Shipper Was		COWAL	WAY	
Street 1516	S. GR	AHAM S	T.			City Soc 4	1/2	State	Zip Code	
City SEATT	LE	State, V	VA	Zip Code	98108		80	00-540-749		
Route						24 hr. Emergency Co	ntact Tel. No.	Vehic Numb	le	
No. of Units & Container Type	НМ	Proper Shi UN or NA	B ipping Name, Hazard ( A Number, Packing Gro	ASIC DESCR Class Or UN or oup	IPTION r NA Number, Pro Hazard Class, P	per Shipping Name, acking Group	TOTAL QUANTITY (Weight, Volume, Gallons, etc.)	WEIGHT (Subject to Correction)	RATE	CHARGES (For Carrier Use Only)
In		Now	REGIVE	HTEO	WASTE	-WATTER	5000	Gralla		
1										
						,				N.
PLACA	RDS TE	NDEBED: V	ES D NO D	7		DEMIT				
Note — (1) Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property, as follows: "The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding per per (2) Where the applicable tariff provisions specify a limitation of the carrier's liability absent a release of a value declaration by the shipper and the shipper does not release the carrier's liability or declare a value, the carrier's liability shall be limited to the externt rasport according .to appli		fully and accurately by the proper shipping classified, packaged, led/placarded, and are proper condition for	COD Amt: \$ C.O.D. FEE: PREPAID COLLECT \$							
must be so marked and pa	special or add ckaged as to e reight Bills an	itional care or atten ensure safe transpo d Statements of Ch	tion in handling or stowing rtation. See Section 2(e) of narges and Section 1(a) of	regulations.	Signature	following statement: The carrier shall not make freight and all other lawful charge	n the consignor, the consignor delivery of this shipment withouses.	ut payment of FR	EIGHT CHAR	GES ck box if charges are to be collect
the tents (the poss natio	oroperty describ of packages of word carrier be ession of the property, if on its route	ed above in appared inknown), marked, co sing understood thro coperty under the cor e, otherwise to delive	is and tariffs in effect on the dai int good order, except as note consigned, and destined as in ughout this conflact as mean atract) agrees to carry to its us or to another carrier on the ro- iny of said property over all of	ed (contents and con- ndicated above which ning any person or c sual place of delivery oute to said destination	dition of con- h said carrier corporation in at said desti- on. It is mutu-	performed hereunder sh sillication on the date of s Shipper hereby	certifies that he is familiar with a and the said terms and conditi	ing terms and conditions in	the governing cla	S-
SHIPPER	1	1/4		1		CARRIER M	ARINE VACU	UM SERVI	CE INC	).
PER	0	x T	\_			PER	Mh Ch	all		
						DATE	X-11-11			

Permanent post-office address of shipper.

0-16-10

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## STRAIGHT BILL OF LADING

ORIGINAL - NOT NEGOTIABLE

06808 Shipper No.

Carrier No. Date 8/17/2010

MARINE	VACUUM	SERVICE	INC.
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Page	OI (Na	ame o
On Collect on Del	livery shipments, the letters"COD" must appear before consignee's name or as otherwise provided in Item 430,	Sec.1.
TO:	MARINE VACUUM SERVICE INC.	

(SCAC) (Name of carrier)

FROM: Shipper	Wys.	er	Cons	fru	uti	m
Street 4	764	E.	Man	enn	al	way
City S	enth	le	State	WA	Zip Cod	de

1516 S. GRAHAM ST.

SEATTLE

Consignee

WA

98108 Zip Code

800-540-7491

SEATTLE	State, Zip Code	24 hr. Emergency Cor	ntact Tel. No.	0-540-749		
te				Vehicle Number		
lo. of Units Container Type	BASIC DESCRIPTION  Proper Shipping Name, Hazard Class Or NA Number, P UN or NA Number, Packing Group Or Hazard Class,	roper Shipping Name, Packing Group	TOTAL QUANTITY (Weight, Volume, Gallons, etc.)	WEIGHT (Subject to Correction)	RATE	(For Carri Use Only
17/	Non-Regulated Li	gen'd				
	Non-Regulated Lie waste water/gr	and water	2,900ga	l.		
				7/3		
A						
			7 %			
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## PLACARDS TENDERED: YES - NO -

Note — (1) Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property, as follows: "The agreed or declared value of the property is hereby specifically stated by the shipper to

agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding per (2) Where the applicable tariff provisions specify a limitation of the carrier's liability absent a release or a value declaration by the shipper and the shipper does not release the carrier's liability or declare a value, the carrier's liability shall be limited to the extent provided by such provisions. See NMFC Item 172.

(3) Commodities requiring special or additional care or attention in handling or stowing must be so marked and packaged as to ensure safe transportation. See Section 2(e) of item 360, Bills of Lading, Freight Bills and Statements of Charges and Section 1(a) of the Contract Terms and Conditions for a list of such articles.

I hereby declare that the contents of this I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

REMIT C.O.D. TO: **ADDRESS** 

COD Amt: \$

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:

The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

C.O.D. FEE: PREPAID | COLLECT | TOTAL CHARGES

FREIGHT CHARGES FREIGHT PREPAID except when box at right is checked

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), markend, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if is not its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to des-

tination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.

Shipper hereby certifies that he is familiar with all the lading terms and conditions in the

governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

SHIPPER

PER

CARRIER

DATE

MARINE VACUUM SERVICE INC.

PER

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Permanent post-office address of shipper.



APPENDIX D: HAZARDOUS AND NON-HAZARDOUS WASTE MANIFESTS

	N-HAZARDOUS	í			l	f 3. Emerg				_	ımber		
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	erator's Name and Mailir	•							than mailing add				
473 Sea	deral Cente 35 East Mar attle, WA tor's Phone: 253	ginal Way 98134-232	5, Lance H	Kualii		4735 Seatt	East 1 :le, W	Margina A 981:	al Way S 34	South			
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KL	een Environ	mental Te	chnologies	. Inc.	,	1				WAH	000004	<b>457</b>	
7. Trans	sporter 2 Company Nam	е .							U.S. EPA ID	Number 1	<u> </u>		
8. Desi	gnated Facility Name an	d Site Address							U.S. EPA ID	Number			
223	cific Iron 30 4th Ave												٠
Sea Facility	sttle, WA 9 s Phone: 206-6	18124 28-6232		•.	100	74	1.15				NA		
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4	4.			<u> </u>									
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	_			cle									
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9-:	NERATOR'S CERTIFICA	Metal Can  ATION: I certify the ma	aterials described above			ct to federal	regulations fo	or reporting pro	oper disposal of H	dazardous W	/aste.	atin Day	no To
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$\bigcap$	UNIFORM HAZARDOUS WASTE MANIFEST UNIFORM HAZARDOUS WASTE MANIFEST WASTE	- t	B. Emergency Response	1940	4. Manifest	584	imber 539	2 J.	JK
	5. Generator's Name and Mailing Address	G	enerator's Site Address (	f different tha	n mailing addre	ss)			
	Forberal Cember North 1/35 East Marginal Way Sourth Seattle, WA Folla-1588, Lanco Kenll: Generator's Phone: 18.2 021-1808.		1736 Kast X Mattle, WA			eriter)			
Ш	6. Transporter 1 Company Name				U.S. EPA ID I	Number			-
	7. Transporter 2 Company Name		n 3		U.S. EPA ID N		min	A 5(*)	
$\ $	This operation is a second of the second of					10,11201			
	8. Designated Facility Name and Site Address				U.S. EPA ID I	Number			
	Burlington Environmental, Inc. 20245 77th Avenue South _ Sent. WA 98032				ı				
Ш	Facility's Phone:		·	· · · · · · · · · · · · · · · · · · ·	<u> </u>	t. f. A. t. Sa. t	<u> </u>	14.73	
$\ $	9a. 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Numl HM and Packing Group (if any))	ber,	10. Containe No.	Type	11. Total Quantity	12. Unit Wt./Vol.	13.	Waste Code	s
	1		No.	Турс			#16.85 \$ \$ \$ \$		A P
GENERATOR	UN3264, Waste Corrosive Liquids, A x Inorganic, N.O.S., 8, PG II ERG & Lab Pack Lists Attached		***	1)8"	90	i de			
- GENE	2. UNG 993, Maste Flammable Liquids, F X II-ERS # (128) - Lab Pack List	1.0.5., ŝ. In Attaobe	ei i	13169	60	<u>8</u> 3 .	0001	F003	ur 39
	3. UNL992, Waste Flammobie Liquids, A E PG II ERG 9 (120) - Lob Pack List			EM.	25	j.v	1001		
	4 UN3082, Waste Environmentally Have X Substances, Liquid, N.O.S., 9, PG (171) - Lab Pack Lists Attoched			DM	# 2 P	13	M2(02)		
	15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of marked and labeled/placarded, and are in all respects in proper condition for transport Exporter, I certify that the contents of this consignment conform to the terms of the atta. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a	f this consignment are according to applicab ached EPA Acknowled	fully and accurately describe international and natio gment of Consent.	cribed above l nal governme	by the proper sh ntal regulations.	ipping name If export shi	, and are cla pment and i	ssified, packa am the Prima	aged, ary
Ш	Generator's/Offeror's Printed/Typed Name	Signat		- m			Mor	nth Day	Year
$ \downarrow$	Lance of factor		Andrew Control of the	-	Berger L	*	1 2	10	Ed Ko
INT	16. International Shipments Import to U.S.	Export from U.S			· · ·		<u> </u>		
⊢	Transportér signature (for exports only):		Date leaving	g U.S.: /		<del></del>		<del></del>	
世	17. Transporter Acknowledgment of Receipt of Materials	Cianat	· · · · · · · · · · · · · · · · · · ·	- Language Control of the Control of	**		Mon	th Day	Year
贤	Transporter 1 Printed/Typed Name	Signat		T AM	A Commen	Mark State St. of all and all	Mor	th Day	3 <b>\</b>
TRANSPORTER	Transporter 2 Printed/Typed Name	Signat	ure	•			Mor	nth Day	Year
F	18. Discrepancy								
	18a. Discrepancy Indication Space Quantity Type		Residue		Partial Rej	ection	.[	Full Reje	ection
11									
-	18b. Alternate Facility (or Generator)		Manifest Reference I	Number:	U.S. EPA ID N	lumber			
FACILITY									
	Facility's Phone:  18c. Signature of Alternate Facility (or Generator)						I Mo	nth Day	Year
DESIGNATED	100. Organizate of Automate Lauring (Of Generator)					_	IAIC	Day	) Cal
Sign	19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste	treatment, disposal, a	nd recycling systems)		· · · · · · · · · · · · · · · · · · ·	75	· · · · · · ·		<b>\</b>
띰	2. **	3.			4.				
	20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials co	vered by the manifest	except as noted in Item	18a	L				
	Printed/Typed Name	Signat	ure	\			Mo	nth Day	Year
EPA	Form 8700-22 (Rev. 3-05) Previous editions are obsolete.		8 Y 1 C	<del>\</del>	<u> </u>	TO	ANSPO	4   / S	MI//
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UNI	rint or type. (Form designed for use on elite (12-pitch) typewriter.)  FORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)  21. Generator ID Number	22. Page	23. Man	fest Tracking Nu		n Approved	J. UNIS NO	. 2050-00
_	(Continuation Sheet) Senerator's Name	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	<del> </del>	- 30	.5.05 <b>6</b>	\$ \$50 at 1 \$ 2 \$ \$	· · · · · ·	
Čą.	morat seviere Buningstration - Francial Center : So East Marginal Way Bourn	arese (						
25.	Transporter Company Name			U.S. EPA ID I	Number			
26.	Fransporter Company Name			U.S. EPA ID I	Number	:		
27a. HM	27b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	28. Contair	ers Type	29. Total Quantity	30. Unit Wt./Vol.	31.	Waste Code	ıs .
ए ० बॉक	b) UNTER, Washe Toxic, Liquids, Organic, R.O.S., C.I. IN LT Mac & (150) Lab Fack Lists Allangues	सु	. \$08	25	ş.)·	0045	Marks.	
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- 33	8) UN39/7/Waste Hirtzonmentally Hacardons Substances, Bollo, W.V.S., 9, 25 111 (Contain, Chieramne) FRG & (1717	Å	124	4	3.≥	3.36937\+3		
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	ansporterAcknowledgment of Receipt of Materials d/Typed Name Signature					Мо	nth Day	Year
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33, 0	sulepailty			· · · · · · · · · · · · · · · · · · ·				
				· · · · · ·				
36. Ha	zardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and re	cycling systems)						
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							4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	

## GSA – Federal Center South 4735 East Marginal Way South Seattle, WA 98134-2325

## Lab-Pack Drum Control Sheet Manifest Tracking Number 005845392JJK

· · · · · · · · · · · · · · · · · · ·	*Drum*Number		
Page 1, 9b-1	GSA-13085-01	Plastic	55-Gallon
Page 1, 9b-2	GSA-13085-02	Steel	30-Gallon
Page 1, 9b-3	GSA-13085-03	Steel	55-Gallon
Page 1, 9b-4	GSA-13085-04	Steel	55-Gallon
Page 2, 27b-5	GSA-13085-05	Plastic	55-Galion
Page 2, 27b-6	GSA-13085-06	Plastic	5-Gallon
Page 2, 27b-7	GSA-13085-07	Plastic	2.5-Gallon
Page 2, 27b-8	NA	Steel	55-Gallon
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## Kleen Environmental Technologies, Inc. RCRA Land Disposal Restriction Notification Form-LP This form is applicable to shipments of lab packs containing RCRA hazardous wastes.

Generator: GSA – Federal Center South	U.S. EPA I.D. #:	WA8470031891
Burlington Profile #: 467945-00	Manifest:	005845392JJK
The hazardous waste lab pack(s), as indicated below, are included in disposal restrictions of 40 CFR Part 268. The wastes do not meet the tre meet the applicable prohibition levels specified in 268.32 or RCRA S submitted to Burlington Environmental in accordance with 40 CFR 268 designated by a check mark in the appropriate box(es) and has been sign	atment standards specified ection 3004(d). This not 3.7(a). The applicable not	d in Part 268, Subpart D or do not ification and certification form is ification/certification statement is
NOTIFICATION: The following type(s) of lab pack(s), as designated be this waste shipment. Individual lab packs are identified below by their Lab Pack Drum Inventory Sheet(s) lists the wastes contained in each information.	associated drum identification	ation number. The accompanying
X PACKED TO MEET ALTERNATIVE TREATMENT STANDAL not include the following waste codes, as specified in Appendix IV K062, K071, K100, K106, P010, P011, P012, P076, P078, U134, on the attached inventory sheet(s). Notifications for lab packs man to address underlying hazardous constituents.	V to part 268: D009, F019 U151. EPA waste codes	, K003, K004, K005, K006, and subcategories are included
Treatability Group: X Nonwastewater	< 1% filterable solids and <	1% Total Organic Carbon)
This notification and certification applies to the following drums include	ded in this waste shipmen	t:
Drum identification number(s) include: GSA-13085-01. 02	2. 03. 04. 05 and 06	
"I certify under penalty of law that I personally have examined and contain any wastes identified at Appendix IV to part 268. I am awa certification, including the possibility of fine or imprisonment".		
X NOT PACKED TO MEET ALTERNATIVE TREATMENT ST under the alternative treatment standards of 40 CFR 268.42(c) must and attach Form EZ. Complete and attach Form UC if needed to ac expected to be present.	st meet the requirements o	of 40 CFR 268.7(a)(1). Complete
This notification applies to the following drums included in this waste s	shipment:	
Drum identification number(s) include: GSA-13085-07		
CERTIFICATION STATEMENT: In addition to the applicable certificated ubmitted in this and all associated documents is complete and accurate to		
Signature Title _	Property 1	Janay &
Name_Lance P. LualitDate	9/13/10	<u>,                                     </u>

# ATTACHMENT TO HAZARDOUS WASTE MANIFEST #: ひころをくらろろして体

Page 1 of 1

ContainerWt

Project #: Drum Size: DF55

GSA-13085-01

Drum #:

Generator: Federal Center South, SEATTLE, WA 98134-2325

WA8470031891

EPA ID #:

ωl

Hazard Class:

LABPACK/COMMERCIAL PRODUCT PACK

Date: 9/7/10

13085 Profile:

467945-00

D002 Constituents: EPA Codes:

CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. DOT Proper Shipping Name:

Packing Group: ||

RO

Approved By:

DOT ID #: UN3264

State Codes:

_						
_	DOT	ERCL Ro (Ib)				1
<b>3</b>	Waste	Amount (Pounds)	32	80	28	
ပ	, T S & S & S & S	Type/Size	GĽ	GL/	GL/	
iii.	्ध (	Çont.	258.00	4.00	184.00	
्राम	Gas/	Solid/ Liquid			ر	
D 3		Waste Code				
Ď 2	ı Ü	Cat.				
D.I	EPA	Waste Code	D002	D002	D002	
င့် ဒွဲ	Packin	Group	=	=	=	
Ç 2	DOT   DOT	# Q	UN3264	UN3264	UN3264	
Č 1	D D	(sub. haz.)				
<b>B</b>	Description	/sical)	Hydrochloric Acid 5-10% Solution	Hydrochloric Acid 5-10% Solution	5-10%	
			Hydrochloric	Hydrochloric	Sulfuric Acid 5-10%	
γ		Tem L	-	2	က	

For all labpacks with RCRA codes, use LDR form LP.
The following wastes are excluded from 40 CFR 268.42(c) alternative treatment standard (NCIN) per Appendix IV and will require from EZ: D009, F019, K0033-6, K062, K071, K100, K106, P010-12, P076, P078, U134.

Note:

All RCRA labpacks must meet 40 CFR 264.316 and 265.316.

DOT's labpack exemption (49 CFR 173.12) includes only Class 3, 4.1, 4.2, PGII, III, 4.3, 5.1, 6.1, PGII, III, 8 or 9, transported by highway only.

DOT's labpack exemption (49 CFR 173.12) includes only Class 3, 4.1, 4.2, PGII, III, 4.3, 5.1, 6.1, PGII, III, 8 or 9, transported by highway only.

Only the same hazard class can be packaged in an outer package (drum). Inner packages must be < = 5.3 gallons in metal or plastic.

The following hazardous materials are excluded from DOT's labpack exemption: 6.1 PG 1, 4.2 PG 1, bromine pentafluoride, bromine trifluoride, chloric acid, and fuming sulfuric acid.

M = metal, GL = glass, PL = plastic, CB = cardboard, CBT = CB tube, P = paper

# ATTACHMENT TO HAZARDOUS WASTE MANIFEST #: COSS4539JJK

Page 1 of 1

ContainerWt

Date: 9/7/10					
Project #: 13085	<b>Profile:</b> 467945-00	000	Approved By:		
GSA-13085-02 Drum Size: DM30		FLAMMABLE LIQUIDS, N.O.S.	²acking Group: ∐ RQ:	State Codes:	
Drum #:	SEATTLE, WA 98134-2325	DOT Proper Shipping Name:	DOT ID #: <u>UN1993</u>		
LABPACK/COMMERCIAL PRODUCT PACK	Generator: Federal Center South, SEATTLE, WA 98134-2325	EPA ID #: WA8470031891	Hazard Class: $\frac{3}{}$	EPA Codes: D001 F003 U239	Constituents:

¥		Ç 1	62	င္ဒ	. D.1	Ď.3	ध्या	sц	*ບ	1	_
Ifem	Description (chemical and physical)	Haz. Class (sub. haz.)	DOT.   DOT   Pa   Ib#   Gr	Packin Group	EPA Sub. Waste Code Sub.	State Waste Gode	Gas/ Solid/ Lighted	# of Cont.	Container Type/Size	- K 0	DOT ERCL PO (Ib)
-	Mineral Spirits/Isobaraffinic Hydrocarbons, 40-60%, Water 40-60%	3	UN1993		D001		_	64.00	GL/	32	(II)
7	Ethicon Gut Suture Material Contained in Xylene - Sealed Tubes, Unused	3	UN1993 II		D001 U239		_	85.00	СГ	1.5	
က	Xylene, Water Mix	3	UN1993 II	-	D001 F003		٦	1.00	ПЭ	4.5	
	7								· · · ·		

For all labpacks with RCRA codes, use LDR form LP.
The following wastes are excluded from 40 CFR 268.42(c) alternative treatment standard (NCIN) per Appendix IV and will require from EZ: D009, F019, K0033-6, K062, K071, K100, K106, P010-12, P076, P078, U134. Note:

All RCRA labpacks must meet 40 CFR 264.316 and 265.316.
DOT's labpack exemption (49 CFR 173.12) includes only Class 3, 4.1, 4.2, PGII, III, 4.3, 5.1, 6.1, PGII, III, 8 or 9, transported by highway only.
Only the same hazard class can be packaged in an outer package (drum). Inner packages must be < = 5.3 gallons in metal or plastic.
The following hazardous materials are excluded from DOT's labpack exemption: 6.1 PG 1, 4.2 PG 1, bromine pentafluoride, bromine trifluoride, chloric acid, and fuming sulfuric acid.

M = metal, GL = glass, PL = plastic, CB = cardboard, CBT = CB tube, P = paper

LABPACK/COMMERCIAL PRODUCT PACK

# ATTACHMENT TO HAZARDOUS WASTE MANIFEST #: @0584539301K

Page 1 of 1

Container Wt

Date: 9/7/10

GSA-13085-03 Drum #: Generator: Federal Center South, SEATTLE, WA 98134-2325

Drum Size: DM55

Project #: 13085 Profile:

467945-00

Approved By:

S S

FLAMMABLE LIQUIDS, N.O.S.

DOT Proper Shipping Name:

WA8470031891

EPA ID #:

DOT ID #: UN1993

Packing Group: II

State Codes:

Constituents:

D001 က

EPA Codes:

Hazard Class:

RQ (Ib) DOT ERCL Waste Amount (Pounds) Ι 30 38 Container Type/Size Ö GL' G 45.00 133.00 Cont. 10 # ķЦ Solid Liquid Gas/ ш Waste Code State က Sub. Cat. 02 EPA Waste Code ٥ D001 Packin Group ့ပ ပ = UN1993 DOT ID# ر د د DOT Haz. Class sub. haz. ပ် က Mineral Spirits/Isoparaffinic Hydrocarbons, Water (chemical and physical) Description m Mineral Oil/Water Mixture Mixtrure Item ⋖

For all labpacks with RCRA codes, use LDR form LP.
The following wastes are excluded from 40 CFR 268.42(c) alternative treatment standard (NCIN) per Appendix IV and will require from EZ: D009, F019, K0033-6, K062, K071, K100, K106, P010-12, P076, P078, U134.

Note:

All RCRA labpacks must meet 40 CFR 264.316 and 265.316.

DOT's labpack exemption (49 CFR 173.12) includes only Class 3, 4.1, 4.2, PGII, III, 4.3, 5.1, 6.1, PGII, III, 8 or 9, transported by highway only.

Only the same hazard class can be packaged in an outer package (drum). Inner packages must be < = 5.3 gallons in metal or plastic.

The following hazardous materials are excluded from DOT's labpack exemption: 6.1 PG 1, 4.2 PG 1, bromine pentafluoride, bromine trifluoride, chloric acid, and fuming sulfuric acid.

G = gallon, QT = quart, PT = pint, L = liter, ml = milliliter, lb = pound, oz = ounce, g = gram, mg = milligram

M = metal, GL = glass, PL = plastic, CB = cardboard, CBT = CB tube, P = paper

# ATTACHMENT TO HAZARDOUS WASTE MANIFEST #: COSSUSSISTIA

Page 1 of 1

ContainerWt

9/7/10

Date:

13085

Project #:

GSA-13082-04 Drum #: Federal Center South, SEATTLE, WA 98134-2325 LABPACK/COMMERCIAL PRODUCT PACK

Drum Size: DM55 DOT Proper Shipping Name:

467945-00 Profile:

Approved By:

ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. Packing Group: III

WT02

State Codes:

DOT ID #: UN3082

WA8470031891

EPA ID #:

Generator:

Hazard Class:

EPA Codes:

Constituents:

RQ (Ib) DOT ERCL Amount (Pounds) Waste I 15 54 10 12 22 Container Type/Size O GL/ GL GĽ, GL/ GL/ 19.00 8.00 8.00 51.00 76.00 # of Cont. Щ Liquid Solid/ S Ш S Waste Code State \_\_\_\_ WT02 WT02 WT02 WT02 WT02 Sub. Cat. د ص EPA Waste Code ۵ Packin Group ္က = ≡ ≡ = = UN3082 UN3082 UN3082 UN3082 UN3082 #□ DOT 2 DOL Haz. Class (sub. haz.) ပ် 6 6 6 O O Glass Bottles - Empty/Residues - Trace Glycol and (chemical and physical) Description m Sulfathiazole (Winthrop) Magnesium Sulfate Calcium Chloride Calcium Sulfate Water Solution tem က S

For all labpacks with RCRA codes, use LDR form LP.
The following wastes are excluded from 40 CFR 268.42(c) alternative treatment standard (NCIN) per Appendix IV and will require from EZ: D009, F019, K0033-6, K062, K071, K100, K106, P010-12, P076, P078, U134.

Note:

All RCRA labpacks must meet 40 CFR 264.316 and 265.316.

DOT's labpack exemption (49 CFR 173.12) includes only Class 3, 4.1, 4.2, PGII, III, 4.3, 5.1, 6.1, PGII, III, 8 or 9, transported by highway only.

Chiy the same hazard class can be packaged in an outer package (drum). Inner packages must be < = 5.3 gallons in metal or plastic.

The following hazardous materials are excluded from DOT's labpack exemption: 6.1 PG 1, 4.2 PG 1, bromine pentafluoride, bromine trifluoride, chloric acid, and fuming sulfuric acid.

M = metal, GL = glass, PL = plastic, CB = cardboard, CBT = CB tube, P = paper

## ATTACHMENT TO HAZARDOUS WASTE MANIFEST #: COSSMS352TCK

Drum Size: DF55

Page 1 of 1

Container Wt

Date: 9/7/10

GSA-13085-05 Drum #: ABPACK/COMMERCIAL PRODUCT PACK

TOXIC, LIQUIDS, ORGANIC, N.O.S. DOT Proper Shipping Name: Generator: Federal Center South, SEATTLE, WA 98134-2325

467945-00 13085 Project #: Profile:

Approved By:

WT02 RÖ

State Codes:

Packing Group: II

**DOT ID #: UN2810** 

WA8470031891

EPA ID #:

6.1

Hazard Class:

Constituents:

**U044** 

EPA Codes:

RQ (Ib) ERCL DOT Pounds) Amount Waste 28 2 2 9 3 Type/Size Container Ö PLGĽ, GL/ GL. PΓ 1.00 1.00 8.00 3.00 92.00 Cont. # of عان Gas/ Solid/ Liquid \_ S \_ Waste Code State က WT02 WT02 WT02 WT02 WT02 Sub. Cat. 2 EPA Waste Code ြ U044 Group Packin ဗ = = = UN2810 UN2810 UN2810 # DOT ٠ د DOT Haz. Class (sub. haz.) ပ် 6.1 6.1 6.1 6.1 Bottles, Empty/Residues Last Contained: Formaldehyde 3-5%, Methanol 5-10%, Phenol 3-5%, Magnesium (chemical and physical) Description m Chloroform, Unused Calcium Acetate Atropine Sulfate Atropine Sulfate Sulfate 1-3% Item ≺

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ć 4

For all labpacks with RCRA codes, use LDR form LP.

The following wastes are excluded from 40 CFR 268.42(c) alternative treatment standard (NCIN) per Appendix IV and will require from EZ: D009, F019, K0033-6, K062, K071, K100, K106, P010-12, P076, P078, U134

Note:

All RCRA labpacks must meet 40 CFR 264.316 and 265.316.

DOT's labpack exemption (49 CFR 173.12) includes only Class 3, 4.1, 4.2, PGII, III, 4.3, 5.1, 6.1, PGII, III, 8 or 9, transported by highway only.

DOT's labpack exemption (49 CFR 173.12) includes only Class 3, 4.1, 4.2, PGII, III, 4.3, 5.1, 6.1, PGII, III, 8 or 9, transported by highway only.

Chily the same hazard class can be packaged in an outer package (drum). Inner packages must be < = 5.3 gallons in metal or plastic.

The following hazardous materials are excluded from DOT's labpack exemption: 6.1 PG 1, bromine pentafluoride, bromine trifluoride, chloric acid, and fuming sulfuric acid.

M = metal, GL = glass, PL = plastic, CB = cardboard, CBT = CB tube, P = paper

## ATTACHMENT TO HAZARDOUS WASTE MANIFEST #: 00564535270K

Page 1 of 1

Drum Size: DF55

13085

ContainerWt

Date: 9/7/10

Generator: Federal Center South, SEATTLE, WA 98134-2325

WA8470031891

EPA ID #:

6.1

Hazard Class:

LABPACK/COMMERCIAL PRODUCT PACK

DOT Proper Shipping Name:

**DOT ID #: UN2810** 

467945-00 Project #: Profile:

> TOXIC, LIQUIDS, ORGANIC, N.O.S. Packing Group: ∐

GSA-13085-05

Drum #:

Approved By:

RÖ

Constituents:

EPA Codes:

WT02 State Codes: **U044** 

	<b>m</b>	C1	C 2	င့္ခ		D 2		§Ш	Ш	ූග	<b>I</b>	
	Description (chemical and physical)	Haz. Ciass (Sub. haz.)	DOT DOT ID#	Packin Group	EPA Waste Code	Sub. Cat.	State Waste Code	Gas/ Solid/	# of Cont.	Container Type/Size	Waste Amount	DOT ERCL
1 38 –	Bottles, Empty/Residues Last Contained: Formaldehyde 63-5%, Methanol 5-10%, Phenol 3-5%, Magnesium Sulfate 1-3%	6.1	UN2810	=					92.00	GL/	28	(GL) PA
		6.1	UN2810	=			WT02	1	1.00	PU	2	
	9	6.1		=			WT02	S	1.00	PU		
Calcium Acetate	-						WT02	با	3.00	GL/	9	
Chloroform, Unused		6.1	UN2810	=	U044	-	WT02		8.00	GL/ *	3	
										, t		
			*									
								.*				
_												
						,		,		· · · · · · · · · · · · · · · · · · ·		
				•								

For all labpacks with RCRA codes, use LDR form LP.
The following wastes are excluded from 40 CFR 268.42(c) alternative treatment standard (NCIN) per Appendix IV and will require from EZ: D009, F019, K0033-6, K062, K071, K100, K106, P010-12, P076, P078, U134. Note:

All RCRA labpacks must meet 40 CFR 264.316 and 265.316.

DOT's labpack exemption (49 CFR 173.12) includes only Class 3, 4.1, 4.2, PGII, III, 4.3, 5.1, 6.1, PGII, III, 8 or 9, transported by highway only.

Only the same hazard class can be packaged in an outer package (drum). Inner packages must be < = 5.3 gallons in metal or plastic.

The following hazardous materials are excluded from DOT's labpack exemption: 6.1 PG 1, 4.2 PG 1, bromine pentafluoride, bromine trifluoride, chloric acid, and fuming sulfuric acid.

M = metal, GL = glass, PL $^{\mid}$ = plastic, CB = cardboard, CBT = CB tube, P = paper

# ATTACHMENT TO HAZARDOUS WASTE MANIFEST #: 00584535210K

Page 1 of 1

ContainerWt

Date: 9/7/10

13085

467945-00

Profile:

Project #:

Drum Size: DF05

GSA-13085-06

Drum #:

Generator: Federal Center South, SEATTLE, WA 98134-2325

WA8470031891 ωl

EPA ID #:

Hazard Class:

Constituents: EPA Codes:

LABPACK/COMMERCIAL PRODUCT PACK

Approved By:

DOT Proper Shipping Name: DOT ID #: UN3266

CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. Packing Group: II

State Codes:

			<del>,</del>		
	DOT ERCL Ro (lb)	121			
	Waste Amount (Pounds)	9	0.75	2	
ခွ	Container Type/Síze	GĽ	GĽ/	GL/	
ш	# of Conf.	1.00	1.00	1.00	
ш	Gas/ Solid/ Líquid	1,1	٦	7	
D3 Stata	Waste Code				
D 2	Sub. Cat.				
Ďί EPΔ	Waste Code	D002	D002	D002	
င်း	Packin Group				
C.2 Dot	5.#	UN3266	UN3266	UN3266	
C1	Ház. Cláss (Sub. ház.)	8	8	8	
<b>n</b>	Description (chemical and physical)	Sodium Hydroxide 3-5% Solution	Sodium Hydroxide 3-5% Solution	Calcium Hydroxidę Solution	*
A	ltem.	-			
Ž		_	7	3	lander

For all labpacks with RCRA codes, use LDR form LP.
The following wastes are excluded from 40 CFR 268.42(c) alternative treatment standard (NCIN) per Appendix IV and will require from EZ. D009, F019, K0033-6, K062, K071, K100, K106, P010-12, P076, P078, U134.

Note:

All RCRA labpacks must meet 40 CFR 264.316 and 265.316.

DOT's labpack exemption (49 CFR 173.12) includes only Class 3, 4.1, 4.2, PGII, III, 4.3, 5.1, 6.1, PGII, III, 8 or 9, transported by highway only.

Only the same hazard class can be packaged in an outer package (drum). Inner packages must be < = 5.3 gallons in metal or plastic.

The following hazardous materials are excluded from DOT's labpack exemption: 6.1 PG 1, 4.2 PG 1, bromine pentafluoride, bromine trifluoride, chloric acid, and fuming sulfuric acid.

M = metal, GL = glass, PL = plastic, CB = cardboard, CBT = CB tube, P = paper

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LABPACK/COMMERCIAL PRODUCT PACK

## ATTACHMENT TO HAZARDOUS WASTE MANIFEST #: @S&4539256

Page 1 of 1

Container Wt

GSA-13085-07 Drum #:

Drum Size: DF05

13085

Packing Group: ∐ DOT ID #: UN1992 WA8470031891 D001 D009 Hazard Class: Constituents: EPA Codes: EPA ID #:

Date: 9/7/10 Approved By: 467945-00 Project #: Profile: RÖ. FLAMMABLE LIQUIDS, TOXIC, N.O.S. State Codes: DOT Proper Shipping Name: Generator: Federal Center South, SEATTLE, WA 98134-2325

-	DOT ERCL Ro (Ib)					 10 P		
		2						٠
ුල	Container Type/Size	GL/		, 1sai 1				
ůĽ.		17.00			•			
ψШ	Gas/ Solid/ Liquid							····
D.3	Wast							
D 2	Sub. Cat.							
P 4	EPA Waste Code	D001 D009	·					
င်ဒ	Packin Group	=						
Č 2	DOT lass DOT naz.) ID#	UN1992						
Łο	Ház. Cláss (Súb. ház.)	દ					 	
<b>M</b>	Description (chemical and physical)	Non-Boilable Gut Suture Material Contained in 95% Ethanol, 0.03% Phenylmercuric Benzoate - Sealed Glass Tubes				 	7	
		Non-Boilable Ethanol, 0.03 Glass Tubes						
À	lítém	_				 		

For all labpacks with RCRA codes, use LDR form LP.
The following wastes are excluded from 40 CFR 268.42(c) alternative treatment standard (NCIN) per Appendix IV and will require from EZ: D009, F019, K0033-6, K062, K071, K100, K106, P010-12, P076, P078, U134.

Note:

All RCRA labpacks must meet 40 CFR 264.316 and 265.316.

DOT's labpack exemption (49 CFR 173.12) includes only Class 3, 4.1, 4.2, PGII, III, 4.3, 5.1, 6.1, PGII, III, 8 or 9, transported by highway only.

DOT's labpack exemption (49 CFR 173.12) includes only Class 3, 4.1, 4.2, PGII, III, 4.3, 5.1, 6.1, PGII, III, 8 or 9, transported by highway only.

Only the same hazard class can be packaged in an outer package (drum). Inner packages must be < = 5.3 gallons in metal or plastic.

The following hazardous materials are excluded from DOT's labpack exemption: 6.1 PG 1, 4.2 PG 1, bromine pentafluoride, bromine trifluoride, chloric acid, and fuming sulfuric acid.

M = metal, GL = glass, PL ≈ plastic, CB = cardboard, CBT = CB tube, P = paper

				EHS - International
APPENDIX F. 1	RORING I OGS	AND WELL	CONSTRUC	TION DETAILS
AITENDIX E.		AND WELL	CONSTRUC	HON DETAILS



Boring #	FCS-SB7
Total depth	8 feet
Sheet 1	of 1

Project name	Federal Ctr. S.	Drilling Contractor NW Probe	Drilling method Driven push probe
Project number	10048-10	Location Approximately 40 feet	S of Sampling method4-foot lined probe sampler
Client GSA		HCB-5	Ground elevation N/A
EHSI rep. D.	Phelan	Start date <u>8-16-2010</u>	Air monitoring (Y/N) Yes
WDOE Tag No.	N/A	Compl. date 8-16-2010	Instrument(s) MiniRAE 3000 PID

Instrument reading (ppm)	Sample type, interval	% recovery	Depth (feet, BGS)	Water level (feet)	Soil group	Soil description
						Asphalt
4.7	4-foot probe	75	1 2		SP	Olive brown (2.5Y 4/3) fine-grained SAND, moist
	sampler		3			
			4			
	4-foot		5		SP	Black (2.5Y 2/1) fine- to medium-grained SAND, moist to wet
Not	probe	85	6		51	
measured	sampler		7	$\overline{\triangle}$		Ground water encountered during drilling at approximately 6.5 feet bgs.
			8			
			9			Soil boring terminated at 8 feet bgs. The borehole was backfilled from the bottom up to near the surface with bentonite chip seal, and capped at the surface with asphalt patch.
			10			and suppose at the surface with aspirate parent
			11			
			12			
			13			
			14			
			15			
			16			
			17			
			18			
			19			
			20			



 Boring #
 FCS-SB8

 Total depth
 8 feet

 Sheet
 1
 of
 1

Project name F	ederal Ctr. S.	Drilling Contracto	r NW Probe	Drilling method	Driven push probe
Project number	10048-10	Location Appro	oximately 40 feet N of	Sampling method	4-foot lined probe sampler
Client GSA		HCB-5		Ground elevation	N/A
EHSI rep. D. Ph	nelan	Start date 8-1	6-2010	Air monitoring (Y/N)	Yes
WDOE Tag No.	N/A	Compl. date 8	3-16-2010	Instrument(s)	MiniRAE 3000 PID

Instrument reading (ppm)	Sample type, interval	% recovery	Depth (feet, BGS)	Water level (feet)	Soil group	Soil description
						Asphalt
	4-foot		1		SP	Olive brown (2.5Y 4/3) fine-grained SAND, moist
3.1	probe	80	2		51	Onve blown (2.3.1 4/3) line-grained SAND, moist
	sampler		3			
			4			
			5			
	4-foot				SP	Black (2.5Y 2/1) fine- to medium-grained SAND, moist to wet
5.0	probe	85	6	$\overline{\triangle}$		Ground water encountered during drilling at approximately 6 feet bgs.
	sampler		7			
			8		ML	Very dark gray (2.5Y 3/1) SILT, moist to wet
			9			Soil boring terminated at 8 feet bgs. The borehole was backfilled from the bottom up to near the surface with bentonite chip seal,
			10			and capped at the surface with asphalt patch.
			11			
			12			
			13			
			14			
			15			
			16			
			17			
			18			
			19			
			20			



Boring #	FCS-SB9
Total depth	8 feet
Shoot 1	of 1

Project name	Federal Ctr. S.	Drilling Contra	actor N	NW Probe	Drilling method	Driven push probe
Project number	10048-10	Location A	Approximate	ely 40 feet W of	Sampling method	4-foot lined probe sampler
Client GSA		SB7			Ground elevation	N/A
EHSI rep. D.	Phelan	Start date	8-16-2010	)	Air monitoring (Y/N	) Yes
WDOE Tag No.	N/A	Compl. date	8-16-20	10	Instrument(s)	MiniRAE 3000 PID

Instrument reading (ppm)	Sample type, interval	% recovery	Depth (feet, BGS)	Water level (feet)	Soil group	Soil description
						Asphalt
3.1	4-foot probe	80	1 2		SP	Olive brown (2.5Y 4/3) fine-grained SAND, dry to moist
	sampler		3			
			4			
	4-foot		5	$\nabla$		Ground water encountered during drilling at approximately 5 feet bgs.
5.0	probe sampler	85	6		SP	Black (2.5Y 2/1) fine-grained SAND, 4 inch thick very dark grayish brown SILT at approximately 5 feet bgs, wet
			7			
			8			
			9			Soil boring terminated at 8 feet bgs. The borehole was backfilled from the bottom up to near the surface with bentonite chip seal, and capped at the surface with asphalt patch.
			10			and capped at the surface with aspitant paten.
			11			
			12			
			13			
			14			
			15			
			16			
			17			
			18			
			19			
			20			



Boring #	FCS-SB10
Total depth	8 feet
Sheet 1	of 1

Project name	Federal Ctr. S.	Drilling Contra	actor	NW Probe	Drilling method	Driven push probe
Project number	10048-10	Location A	Approxima	ately 40 feet SW of	Sampling method	4-foot lined probe sampler
Client GSA		SB8			Ground elevation	N/A
EHSI rep. D.	Phelan	Start date	8-16-20	10	Air monitoring (Y/N)	Yes
WDOE Tag No.	N/A	Compl. date	8-16-2	2010	Instrument(s)	MiniRAE 3000 PID

Instrument reading (ppm)	Sample type, interval	% recovery	Depth (feet, BGS)	Water level (feet)	Soil group	Soil description
						Asphalt
1.9	4-foot probe	55	1 2		SP	Olive brown (2.5Y 4/3) fine-grained SAND, dry to moist
	sampler		3			
			4			
	4.6		5	$\overline{\triangle}$		Ground water encountered during drilling at approximately 5 feet bgs.
2.8	4-foot probe	65	6		SP	Black (2.5Y 2/1) fine- to medium-grained SAND, wet
	sampler		7			
			8			
			9			Soil boring terminated at 8 feet bgs. The borehole was backfilled from the bottom up to near the surface with bentonite chip seal, and capped at the surface with asphalt patch.
			10			and capped at the surface with asphalt paten.
			11			
			12			
			13			
			14			
			15			
			16			
			17			
			18			
			19			
			20			



## SOIL BORING AND MONITORING WELL CONSTRUCTION RECORD

Boring #	F	CS-E	HSI-	M۷	V1
Total depth		14 f	eet		
Sheet	1		of	1	·

Project name	Federal Ctr. S.	Drilling Contr	actor	NW Probe	Drilling method	Driven push probe
Project number	10048-08	Location 2	23.5 ft E /	34.5 ft N of the NE	Sampling method	4-foot lined probe sampler
Client GSA		corner of Blo	dg 1202		Ground elevation	N/A
EHSI rep. D.	Phelan	Start date	8-16-20	10	Air monitoring (Y/N	Yes
WDOE Tag No.	BBS-008	Compl. date	8-16-	2010	Instrument(s)	MiniRAE 3000 PID

Instrument reading (ppm)	Sample type, interval	% recovery	Depth (feet, BGS)	Water level (feet)	Soil group	Soil description	Well Details
			1			Asphalt, then wooden railroad tie on south side of borehole, and coarse crushed rock	
0.3	4-foot probe sampler	55	2		SP/ SP-SM/	Alternate layers of very dark grayish brown (10YR 3/2), very fine- to fine-grained SAND with trace amounts to some silt and organic SILT	8 8
	Sampler		3		OL/ML	with very fine-grained sand, moist	× ×
			4				
	4.0		5		SP/ SP-SM	Black (2.5Y 2.5/1) very fine-grained SAND, with trace amounts to some silt, moist to wet	
1.5	4-foot probe	90	6	$\overline{\triangle}$		Groundwater encountered during drilling at approximately 5.5 ft bgs.	
1.5	sampler	70	7		ML/OL	Very dark grayish brown (10YR 3/2) organic SILT with minor wood fragments, wet	
			8		SP	Very dark brown (10YR 2/2) fine-grained SAND, wet	
			9				
	4-foot						
Not measured	probe sampler	100	10		SP/	Alternate layers of very dark brown (10YR 2/2) very fine-grained	
measured	sampler		11		SP-SM/	SAND with trace amounts to some silt and very fine-grained sandy	
			12		ML	SILT with minor amounts of organic material (wood), wet	
	4-foot		12				
Not measured	probe sampler	Not recovered	13				
			14				
			15			The bottom of the boring terminated at 14 feet bgs. A 2-inch diameter PVC monitoring well was installed; 0.010-slot, 10-foot PVC screen,	
			16			4-foot PVC riser, silica filter sand, bentonite chip seal, and flush- graded well monument set in place with a concrete surface seal.	
			17				
			18				
			19				
			20				



## SOIL BORING AND MONITORING WELL CONSTRUCTION RECORD

Boring #	F	CS-E	HSI-	M١	N2
Total depth		12.5	5 fee	t	
Sheet	1		of		1

Project name	Federal Ctr. S.	Drilling Contr	actor	NW Probe	Drilling method	Driven push probe
Project number	10048-08	Location 5	57 ft S / 21	I ft W of the NW	Sampling method	4-foot lined probe sampler
Client GSA		corner of Blo	dg 1201		Ground elevation	N/A
EHSI rep. D.	Phelan	Start date	8-16-20	10	Air monitoring (Y/N	) Yes
WDOE Tag No.	BBS-009	Compl. date	8-16-2	2010	Instrument(s)	MiniRAE 3000 PID

Instrument reading (ppm)	Sample type, interval	% recovery	Depth (feet, BGS)	Water level (feet)	Soil group	Soil description	Well Details
1.6	4-foot probe sampler	45	1 2 3 4		SP/ SP-SM	Asphalt  Dark brown (10YR 3/3) very fine-grained SAND, with trace amounts to some silt, moist	<b>X</b>
142.7	4-foot probe sampler	95	5 6 7 8	$\nabla$	SP/ SP-SM SP	Same as above, moist  Groundwater encountered during drilling at approximately 7 feet bgs.  Black (2.5Y 2.5/1) fine-grained SAND, wet; hydrocarbon-like odor	
Not measured	4-foot probe sampler	100	9 10 11		SP/ SP-SM/ ML/SM	noted.  Grades to:  Very dark gray (2.5Y 3/1) very fine-grained SAND to sandy SILT/ silty very fine-grained SAND to SILT, wet	
Not measured	4-foot probe sampler	Not recovered	12 13 14		SP	Black (2.5Y 2.5/1) fine-grained SAND, wet	
			15 16 17			The bottom of the boring terminated at 14 feet bgs. Encountered heave in sand at the bottom of the borehole. The bottom of the Monitoring well was set at 12.5 feet bgs instead. The well consists of 2-inch diameter PVC 2-foot long riser, 0.010-slot, 10-foot PVC screen, silica filter sand, bentonite chip seal, and flush-graded well monument set in place with a concrete surface seal.	
			18 19 20			,	



## SOIL BORING AND MONITORING WELL CONSTRUCTION RECORD

Boring #	F	CS-EI	HSI-	M۷	/3
Total depth		14 fe	eet		
Sheet	1	·	of	1	

Project name	Federal Ctr. S.	Drilling Contra	actor	NW Probe	Drilling method	Driven push probe
Project number	10048-08	Location 6	7 ft N / 31	1.5 ft E of fence	Sampling method	4-foot lined probe sampler
Client GSA		corner; 17.3	ft W of B	ldg 1202	Ground elevation	N/A
EHSI rep. D. I	Phelan	Start date	8-16-20	10	Air monitoring (Y/N)	Yes
WDOE Tag No.	BBS-010	Compl. date	8-16-2	2010	Instrument(s)	MiniRAE 3000 PID

Instrument reading (ppm)	Sample type, interval	% recovery	Depth (feet, BGS)	Water level (feet)	Soil group	Soil description	We Deta	
(PP)			200)	(1001)	g. c up	Asphalt	2010	
2.0	4-foot probe sampler	70	2 3		SP/ SP-SM	Very dark grayish brown (10YR 3/2) very fine-grained SAND, with trace amounts to some silt, moist	***	**
			4					
	4-foot		5		SP/ SP-SM	Same as above, 6 inch thick layer of very fine-grained sandy SILT, moist to wet		
2.2	probe sampler	100	6				E	
	1		7	$\overline{\triangle}$		Groundwater encountered during drilling at approximately 7 feet bgs.	ΙE	
			8		SP	Very dark brown (10YR 2/2) fine- to medium-grained SAND, wet	E	
	4-foot		9					
Not measured	probe sampler	100	10		SP	Grades to: Very dark brown (10YR 2/2) very fine-grained SAND, wet		
	·		11					
	4-foot		12				ΙE	3
Not measured	probe sampler	Not recovered	13		SP	Same as above, wet		
	F -		14					
			15			The bottom of the boring terminated at 14 feet bgs. A 2-inch diameter PVC monitoring well was installed and consisted of 4-foot long, 2-inch diameter PVC riser, 0.010-slot, 10-foot long PVC well screen,		
			16			silica filter sand, bentonite chip seal, and flush-graded well monument set in place with a concrete surface seal.		
			17			see in place with a concrete surface sear.		
			18					
			19					
			20					



## SOIL BORING AND MONITORING WELL CONSTRUCTION RECORD

Boring #	F	CS-E	HSI-	M۷	٧4
Total depth		14 f	eet		
Sheet	1	•	of	1	

Project name	Federal Ctr. S.	Drilling Contra	actor	NW Probe	Drilling method	Driven push probe
Project number	10048-08	Location 1	9 ft S / 17	7 ft W of the NW	Sampling method	4-foot lined probe sampler
Client GSA		corner of Bld	lg 1202		Ground elevation	N/A
EHSI rep. D.	Phelan	Start date	8-16-20	10	Air monitoring (Y/N	) Yes
WDOE Tag No.	BBS-011	Compl. date	8-16-2	2010	Instrument(s)	MiniRAE 3000 PID

Instrument reading (ppm)	Sample type, interval	% recovery	Depth (feet, BGS)	Water level (feet)	Soil group	Soil description		Vell etails
(PPIII)	intorvar	10001019	200)	(1001)	group	Asphalt		rano
5.2	4-foot probe sampler	65	1 2 3		SP/ SP-SM	Dark grayish brown (10YR 4/2) very fine- to fine-grained SAND, with trace amounts to some silt, moist	<b>***</b>	*
			4					
	4-foot		5		SP/ SP-SM	Same as above, moist		
6.4	probe	85	6				-	-
	sampler		7	$\overline{\triangle}$		Groundwater encountered during drilling at approximately 7 feet bgs.		
			8		SP	Black (10YR 2/1) fine- to medium-grained SAND, wet		
	4.6		9					
Not measured	4-foot probe sampler	100	10		SP	Same as above, very fine- to medium-grained SAND, wet		
	1		11					
			12		D.	D.H.	┨	_
	4-foot		13		Pt OL	Dark brown peat, moist  Dark grayish brown (2.5Y 4/2) very organic SILT, with blades of grass, roots, and peat, moist		
Not	probe	90	14			Grades to:		
measured	sampler		15		ML	Dark grayish brown SILT, with some roots, less roots with depth, moist		
			16					
			10			The bottom of the boring terminated at 16 feet bgs. The bottom of a		
			17			2-inch diameter PVC monitoring well was set at 14 feet bgs. The well consisted of a 4-foot long, 2-inch PVC riser, 0.010-slot, 10-foot long		
			18			PVC well screen, silica filter sand, bentonite chip seal, and flush-graded well monument set in place with a concrete surface seal.		
			19			grand with a concrete surface seal.		
			20					

APPENDIX F: SELECT SITE PHOTOGRAPHS



Photo 1. View of the east sidewall of the Central Excavation (-CE-), looking to the east. Dark staining of soil noted on the sidewall of the excavation.



Photo 2. Backfilling completed for the Central Excavation located in the center of the photograph, and South Excavation (not shown; off the left side of the photograph, looking to the north.



Photo 3. View of the eastern portion of the Southwest Excavation during the initial excavation when buried 55-gallon drums and 5-gallon cans that contained petroleum products were encountered (looking to the east).



Photo 4. Metal 55-gallon drums and 5-gallon cans previously contained petroleum products that were removed from the Southwest Excavation and placed on the eastern end of the contaminated soil stockpile.

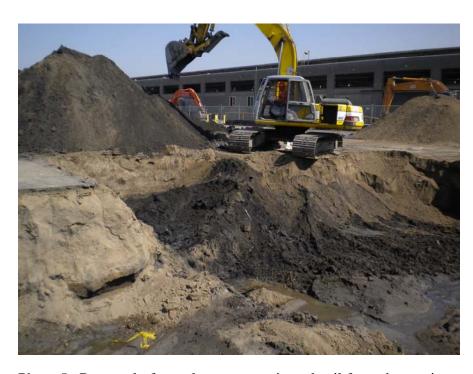


Photo 5. Removal of petroleum-contaminated soil from the portion of the Southwest Excavation where buried petroleum metal drums and cans were encountered (looking to the NE).

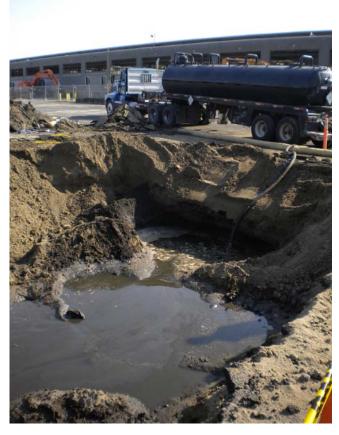


Photo 6. Mar-Vac pumped out water from the Southwest Excavation contaminated with floating petroleum product derived from buried drums and cans (looking to the NE).



Photo 7. Buried drums and cans in the Southwest Excavation.



Photo 8. Discarded medical/pharmaceutical waste encountered within the eastern portion of the Southwest Excavation following removal of buried petroleum drums and cans (in upper left hand corner of the photograph). Looking to the NNW.



Photo 9. A buried can with residual petroleum product released on the contaminated soil stockpile.



Photo 10. Discarded medical/pharmaceutical waste removed from the contaminated soil and separated into similar bottle types.



Photo 11. Start backfilling the Southwest Excavation, looking to the north and northwest.



Photo 12. Start backfilling the Southwest Excavation, looking to the south. The storm water catch basin is shown by the red arrow. The drums next to the southwest portion of the excavation mark the location of monitoring well HCMW-1.



Photo 13. Replacing the storm water drain line in the Southwest Excavation.



Photo 14. Backfilling and site restoration completed for the Southwest Excavation, looking to the west-northwest.



Photo 15. Assorted lidded drums and buckets with yellow "Hazardous Waste" labels contain the medical/pharmaceutical waste sorted by KET according to hazardous material classifications (i.e., flammable liquids, corrosive liquids, toxic material). These drums are ready to be loaded into KET truck for transportation to a TSD facility. The seven 55-gallon drums in the left background contain crushed metal petroleum drums and cans to be handled as solid waste and transported to a recycling facility.

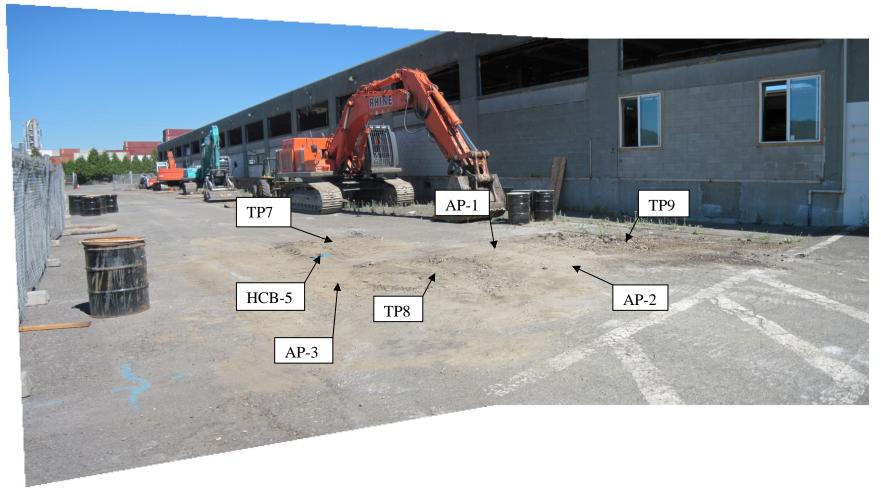


Photo 16. Hart Crowser soil boring HCB-5 (blue file folder on the ground near center of photo) and vicinity, with disturbed asphalt areas marking the locations of EHSI test pit explorations TP7 through TP8, and approximate locations of soil vapor samples AP-1 through AP-3 collected from soil probe borings, looking to the north-northeast.